

RCRA SEMI-ANNUAL GROUNDWATER MONITORING (SWMU #2)

(CALENDAR YEAR 2000)

PREPARED FOR:

TEXTRON AUTOMOTIVE COMPANY

AND

Grenada Manufacturing, LLC

"A Global Leader In Metal Fabrication"

**GRENADA, MISSISSIPPI
GRENADA COUNTY**

PREPARED BY:

Eco-Systems, Inc. 
Consultants, Engineers and Scientists

**439 KATHERINE DRIVE SUITE 2A
JACKSON, MISSISSIPPI 39208
PHONE (662) 322-4440**

**RCRA SEMI-ANNUAL
GROUNDWATER MONITORING
(SWMU #2)**

(CALENDAR YEAR 2000)

PREPARED FOR:

TEXTRON AUTOMOTIVE COMPANY

AND

Grenada Manufacturing, LLC

"A Global Leader In Metal Fabrication"

**GRENADA, MISSISSIPPI
GRENADA COUNTY**

PREPARED BY:

Eco-Systems, Inc. 
Consultants, Engineers and Scientists

**439 KATHERINE DRIVE SUITE 2A
JACKSON, MISSISSIPPI 39208
PHONE (601) 936-4440**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 GROUNDWATER SAMPLING RESULTS	2
2.1 APPENDIX IX VOLATILES	2
2.2 APPENDIX IX SEMIVOLATILES	2
2.3 SELECT APPENDIX IX METALS	2
2.4 GROUNDWATER FLOW PATTERNS	3
2.5 QA/QC RESULTS	3
3.0 SUMMARY AND CONCLUSIONS	4

TABLES

TABLE 1	GROUNDWATER ANALYTICAL RESULTS
TABLE 2	POTENTIOMETRIC SURFACE DATA SHEET
TABLE 3	QA/QC ANALYTICAL RESULTS

FIGURES

FIGURE 1	ANALYTICAL RESULTS OF CONCERN – FIRST SEMI-ANNUAL EVENT, 2000
FIGURE 2	POTENTIOMETRIC SURFACE MAP – FIRST SEMI-ANNUAL EVENT, 2000

APPENDIX

APPENDIX A	GROUNDWATER SAMPLE COLLECTION REPORTS
APPENDIX B	ANALYTICAL DATA SHEETS

1.0 INTRODUCTION

Eco-Systems, Inc. (*Eco-Systems*) has received final analytical results for the First Semi-Annual event of 2000 (S-1 2000) groundwater samples collected from groundwater wells located at the closed lagoon at the Grenada Manufacturing, LLC automotive parts plant in Grenada, Mississippi. This work was performed on behalf of Textron, Inc. and Grenada Manufacturing. This sampling and analysis effort represents the first round of semi-annual sampling required under Section IV. F.1 of Grenada Manufacturing's Hazardous Waste Management (HWM) permit No. MSD007037278. Field activities were conducted on March 9, 2000. This report, along with subsequent reports, may be kept in the RCRA Semi-Annual Groundwater Monitoring (Solid Waste Management Unit (SWMU) #2) binder provided with this report.

Background information pertaining to the Site may be referenced in the Fourth Quarter, 1998 report. Groundwater collection methodologies, sample identification rationale, analytical methods, quality assurance/quality control (QA/QC) procedures, and historical groundwater sampling results for the Site are included in the Fourth Quarter, 1998 report for review. Analytical results for the S-1 2000 sampling event are presented in subsequent sections organized as follows:

- Investigative results of the sampling event (Section 2.0); and
- A report summary and conclusions (Section 3.0).

2.0 GROUNDWATER SAMPLING RESULTS

Groundwater samples were collected on March 9, 2000 from the four (4) monitoring wells specified in the permit utilizing methods and procedures described in Section 2.0 of the Fourth Quarter, 1998 report. Each groundwater sample was analyzed for Appendix IX Volatile Organics, Semivolatile Organics, and the eight (8) RCRA Metals as specified in the RCRA permit. As presented below, detectable results of several compounds of concern (Table 1; Figure 1) were identified from groundwater collected during this event. Groundwater collection forms are provided in Appendix A and laboratory analytical data sheets may be found in Appendix B.

2.1 APPENDIX IX VOLATILES

Groundwater analytical results received from the laboratory analysis indicated that all four (4) of the wells sampled during this event revealed detectable concentrations greater than the laboratory-derived practical quantitation limit (PQL) of 0.005 milligrams per liter (mg/L), equivalent to parts per million (ppm), concentrations of at least one (1) of the Appendix IX Volatile Organic Compounds (VOCs; Table 1). Several chlorinated VOCs, including Trichloroethene (TCE), and several potentially associated degradation products, were identified in wells MW-1, MW-2, MW-4, and MW-5. TCE was detected in these wells at levels ranging from 0.102 mg/L in MW-1 to 21.6 mg/L in MW-2. Several other "degradation products" including 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethene (1,1-DCE), trans-1,2-Dichloroethene (t,1,2-DCE), and Tetrachloroethene (PCE) were identified in downgradient wells at levels up to 0.0392 mg/L (PCE, MW-2). Vinyl Chloride (VC), one of the final chlorinated degradation products of TCE, was detected in MW-2, MW-4 and MW-5 at 0.173 mg/L, 0.073 mg/L, and 0.097 mg/L, respectively.

2.2 APPENDIX IX SEMIVOLATILES

As presented in Table 1, a low level Appendix IX Semivolatile Organic Compound (SVOC) was identified in groundwater samples collected at MW-1 and MW-2 during this event. The SVOC was 1,2,4 Trichlorobenzene at a concentration of 0.054 mg/L in MW-2. All other SVOC results were non-detect (less than the PQL).

2.3 SELECT APPENDIX IX METALS

Two (2) of the four (4) wells (MW-2 and MW-5) sampled during this event revealed detectable levels (greater than the PQL, Table 1) of at least one (1) of the Appendix IX RCRA Metals. Total Chromium was detected in groundwater samples collected from downgradient wells MW-2 and MW-5 at concentrations of 13.2 mg/L and 0.012 mg/L, respectively. Low-level Lead was detected in well MW-2 at a concentration of 0.005 mg/L and Selenium was detected in well MW-5 at a concentration of 0.005 mg/L. All other listed metals were non-detect (less than the PQL) in groundwater collected from all wells sampled during S-1 2000 (Table 1).

2.4 GROUNDWATER FLOW PATTERNS

Water level elevation data obtained during this event is presented in Table 2. As shown on the potentiometric surface map in Figure 2, flow in the vicinity of the closed Equalization Lagoon is generally to the *northwest*. This flow pattern appears to be generally consistent with historical patterns reviewed for the Site.

2.5 QA/QC RESULTS

QA/QC procedures were performed in accordance with Textron's QAPP to assure validity of sampling results. A total of one (1) duplicate sample, one (1) trip blank sample, and one matrix spike/matrix spike duplicate (MS/MSD) sample was collected. Duplicate sample (with normal sample for comparison) results are shown in Table 3 and correspond well with the normal sample results. Trip blank results are also shown in Table 3.

A QA/QC review was performed on all analytical data collected during the current sampling event. Methylene Chloride was detected at very low levels in all analytical samples. Because this chemical is a common laboratory contaminant its presence in the samples suggests laboratory instrument contamination as indicated in Appendix B, Analytical Data Sheets, Report Qualifiers. In addition, methylene chloride has not been observed in historical sampling of these wells by *Eco-Systems*. This compound will be monitored closely in results from future events. In general, *Eco-Systems* concluded that the laboratory analyses were conducted under well-controlled conditions, and with sufficient precision and accuracy to provide accurate analytical results.

3.0 SUMMARY AND CONCLUSIONS

Eco-Systems was commissioned by Grenada Manufacturing, LLC to perform semi-annual groundwater sampling and analysis in accordance with the facility's RCRA permit for the closed Equalization Lagoon. This event represents the first sampling event required under the permit. Water levels and groundwater samples were collected from four (4) monitoring wells surrounding the regulated unit on March 9, 2000 and analyzed for Appendix IX Volatiles, Semivolatiles, and selected Metals. The analytical results have been presented in tabular form (Table 1) as well as graphically for select compounds of concern illustrated on Figure 1. The potentiometric surface and resultant flow patterns were evaluated through the construction of a potentiometric surface map of the Site (Figure 2). Based on review of the groundwater data collected during S-1 2000, *Eco-Systems* presents the following summary and conclusions:

- The industrial solvent TCE was detected in all downgradient wells at concentrations of 21.6 mg/L (MW-2), 0.232 mg/L (MW-4), and 1.33 mg/L (MW-5). Associated chlorinated degradation products were also observed including VC, which was detected at 0.173 mg/L in MW-2, 0.073 mg/L in MW-4 and 0.0973 mg/L in MW-5. The Maximum Contaminant Level (MCL; EPA, December, 1995) for TCE and VC are 0.005 mg/L and 0.002 mg/L, respectively.
- TCE was also detected in the background monitoring well, MW-1, at a concentration of 0.102 mg/L.
- A low level concentration (0.054 mg/L) of the Appendix IX SVOC 1,2,4 Trichlorobenzene was observed in monitoring well MW-2.
- The RCRA metal Chromium (total) was detected in groundwater samples collected from MW-2 and MW-5 at concentrations of 13.2 mg/L and 0.012 mg/L, respectively. The MCL for Total Chromium is 0.100 mg/L.
- Groundwater flow across the Site is generally to the northwest.

TABLES



TABLE 1

GROUNDWATER ANALYTICAL RESULTS

RCRA GROUNDWATER MONITORING - FIRST SEMI-ANNUAL EVENT 2000

GRENADA MANUFACTURING, LLC

GRENADA, MISSISSIPPI

PARAMETER ¹	PQL ² (mg/L)	EPA MCL ³	RESULT CONCENTRATION (mg/L) ⁴			
			MW-1	MW-2	MW-4	MW-5
APPENDIX IX VOLATILES (METHOD 8260)						
Benzene	0.010	0.005	ND ⁵	0.002J ⁶	ND	ND
Chloroethane	0.010	NC ⁷	ND	ND	ND	ND
1,1 - Dichloroethane	0.005	NC	ND	0.0103	ND	0.003J
1,1 - Dichloroethene	0.005	NC	ND	0.0255	0.004J	0.006
Ethylbenzene	0.010	0.7	ND	0.002J	ND	ND
Methylene Chloride	0.010	NC	0.002J	0.002J	0.002J	0.002J
trans - 1,2-Dichloroethene	0.005	NC	ND	0.0141	0.0159	0.0295
Tetrachloroethene	0.005	NC	ND	0.0392	ND	ND
Toluene	0.005	1.0	ND	0.0257	ND	ND
1,1,1 - Trichloroethane	0.005	NC	ND	0.013	ND	ND
1,1,2 - Trichloroethane	0.005	0.005	ND	ND	ND	ND
Trichloroethene	0.010	NC	0.102	21.6	0.232	1.33
Vinyl Chloride	0.010	0.002	ND	0.173	0.073	0.0973
All Others Not Listed	0.005-0.500	-	ND	ND	ND	ND
APPENDIX IX SEMI-VOLATILES (METHOD 8270)						
Bis(2-Ethylhexyl)phthalate	0.01	NC	ND	ND	ND	ND
2-Methylnaphthalene	0.010	NC	ND	0.002J	ND	ND
Naphthalene	0.010	NC	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.010	0.07	ND	0.054	ND	0.003J

TABLE 1 (Continued)

GROUNDWATER ANALYTICAL RESULTS

RCRA GROUNDWATER MONITORING - FIRST SEMI-ANNUAL EVENT 2000

GRENADA MANUFACTURING, LLC

GRENADA, MISSISSIPPI

PARAMETER¹	PQL² (mg/L)	EPA MCL³	RESULT CONCENTRATION (mg/L)⁴			
			MW-1	MW-2	MW-4	MW-5
APPENDIX IX METALS (METHOD 6000/7000 SERIES)						
Arsenic	0.010	0.05	ND	ND	ND	ND
Barium	0.200	2.00	ND	ND	ND	ND
Cadmium	0.005	0.005	ND	ND	ND	ND
Chromium (total)	0.010	0.10	ND	13.2	ND	0.012
Lead	0.003	0.015	ND	0.0047	ND	ND
Mercury	0.0002	0.002	ND	ND	ND	ND
Selenium	0.005	0.05	ND	ND	ND	0.0052
Silver	0.010	0.10	ND	ND	ND	ND

¹ Samples were analyzed for Appendix IX List VOCs, SVOCs, and RCRA Metals. See Appendix C for full list results and detection limits.

² PQL = Practical quantitation limit, or detection limit, for the individual analyses. Necessary sample dilution has raised the PQL in some samples.

³ MCL = Maximum Contaminant Level established by the Environmental Protection Agency Office of Ground Water and Drinking Water.

⁴ Result concentrations are reported in milligrams per liter (mg/L), equivalent to parts per million (ppm).

⁵ Result was below the PQL, or "Non-Detect".

⁶ J = Analyte detected but below the laboratory-derived reporting limit. Value is estimated.

⁷ NC = No Criteria. An MCL has not been established.

TABLE 2

POTENTIOMETRIC SURFACE DATA SHEET

RCRA GROUNDWATER MONITORING - FIRST SEMI-ANNUAL EVENT 2000

GRENADA MANUFACTURING, LLC

GRENADA, MISSISSIPPI

WELL NO.	TOC ELEVATION (ft. MSL) ¹	WATER DEPTH (feet) ²	GROUNDWATER ELEVATION (ft. MSL)
MW-1	185.18	14.60	170.58
MW-2	184.56	14.64	169.92
MW-3	184.00	NA	NA
MW-4	184.33	14.45	169.88
MW-5	184.17	14.32	169.85

¹ TOC = "top of well casing" measured in feet above mean sea level (ft. MSL). The protective metal casing was surveyed by others.² Water depth is a relative depth from the TOC (PVC well).

NA = Measurement not obtained.

TABLE 3
QA/QC ANALYTICAL RESULTS
RCRA GROUNDWATER MONITORING - FIRST SEMI-ANNUAL EVENT 2000
GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

PARAMETER	PQL¹ (mg/L)	RESULT CONCENTRATIONS (mg/L)²		
		Trip Blank	MW-5	Duplicate (from MW-5)
APPENDIX IX VOLATILES (METHOD 8260)				
Chloroethane	0.010	ND ³	ND	ND
1,1 - Dichloroethane	0.005	ND	0.003J ⁴	ND
1,1 - Dichloroethene	0.005	ND	0.006	0.0058
Methylene Chloride	0.005	0.002J	0.002J	0.002J
trans - 1,2-Dichloroethene	0.005	ND	0.0295	0.03
Tetrachloroethene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
1,1,1 - Trichloroethane	0.005	ND	ND	ND
1,1,2 - Trichloroethane	0.005	ND	ND	ND
Trichloroethene	0.005	ND	1.33	1.33
Vinyl Chloride	0.010	ND	0.0973	0.0884
All Others Not Listed	0.005 - 0.500	ND	ND	ND
APPENDIX IX SEMI-VOLATILES (METHOD 8270)				
Bis(2-Ethylhexyl)phthalate	0.010	NA ⁵	ND	ND
2-Methylnaphthalene	0.010	NA	ND	ND
Naphthalene	0.010	NA	ND	ND
1,2,4-Trichlorobenzene	0.010	NA	0.003J	0.003J
All Other Compounds	0.010 - 0.050	NA	ND	ND

TABLE 3 (Continued)
QA/QC ANALYTICAL RESULTS
RCRA GROUNDWATER MONITORING - FIRST SEMI-ANNUAL EVENT 2000
GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

PARAMETER	PQL (mg/L)	RESULT CONCENTRATIONS (mg/L)		
		Trip Blank	MW-5	Duplicate (from MW-5)
APPENDIX IX METALS (METHOD 6000/7000 SERIES)				
Arsenic	0.010	NA ⁵	ND	ND
Barium	0.200	NA	ND	ND
Cadmium	0.010	NA	ND	ND
Chromium	0.010	NA	0.012	0.01
Lead	0.003	NA	ND	ND
Mercury	0.0002	NA	ND	ND
Selenium	0.005	NA	0.0052	ND
Silver	0.010	NA	ND	ND

¹ PQL = Practical quantitation limit, or detection limit, for the individual analyses.

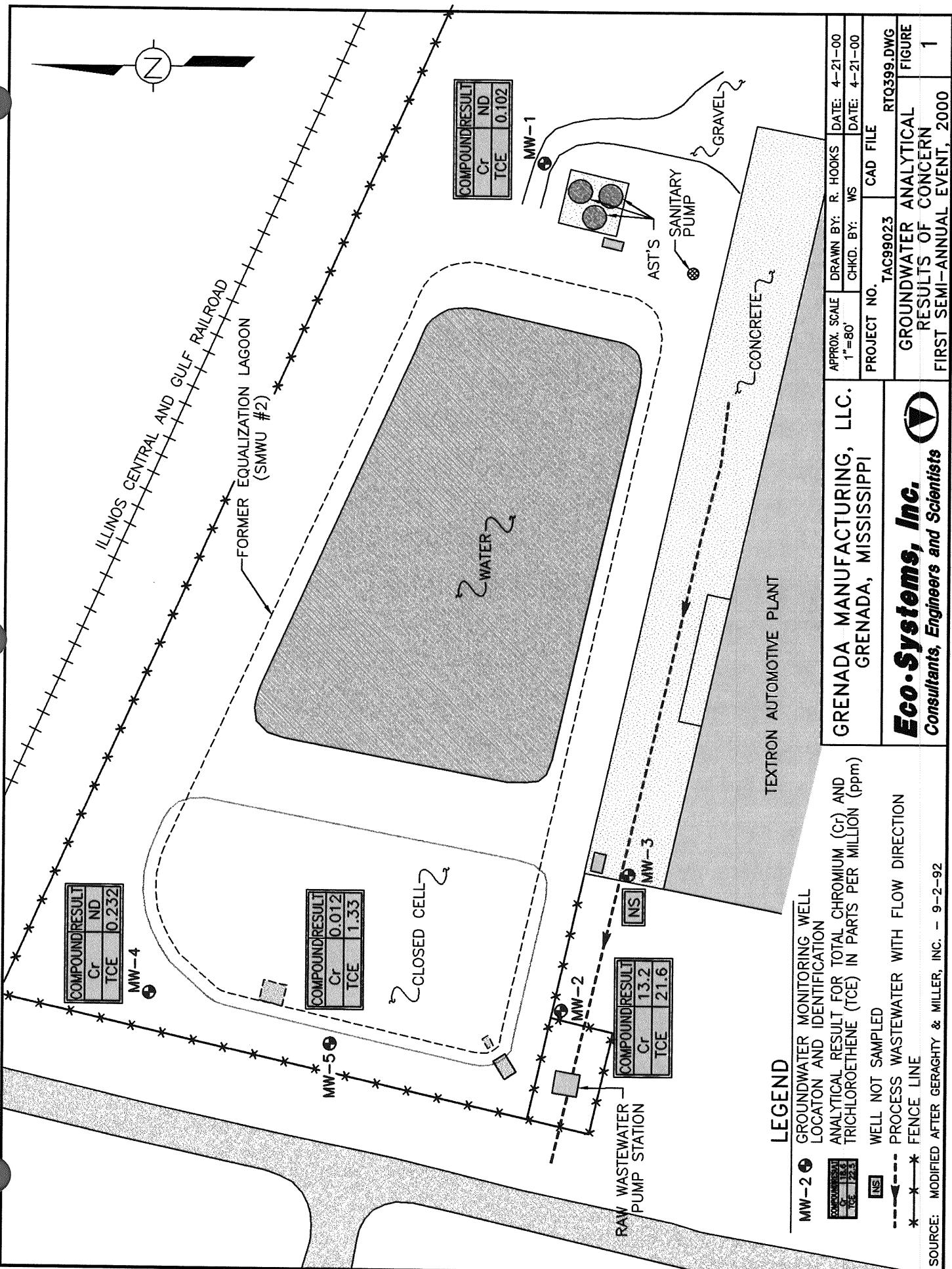
² Result concentrations are reported in milligrams per liter (mg/L), equivalent to parts per million (ppm).

³ Result was below the PQL, or "Non-Detect"

⁴ J = Analyte detected but below the laboratory-derived reporting limit. Value is estimated.

⁵ Inorganic analyses were "not applicable" per convention and project scope.

FIGURES

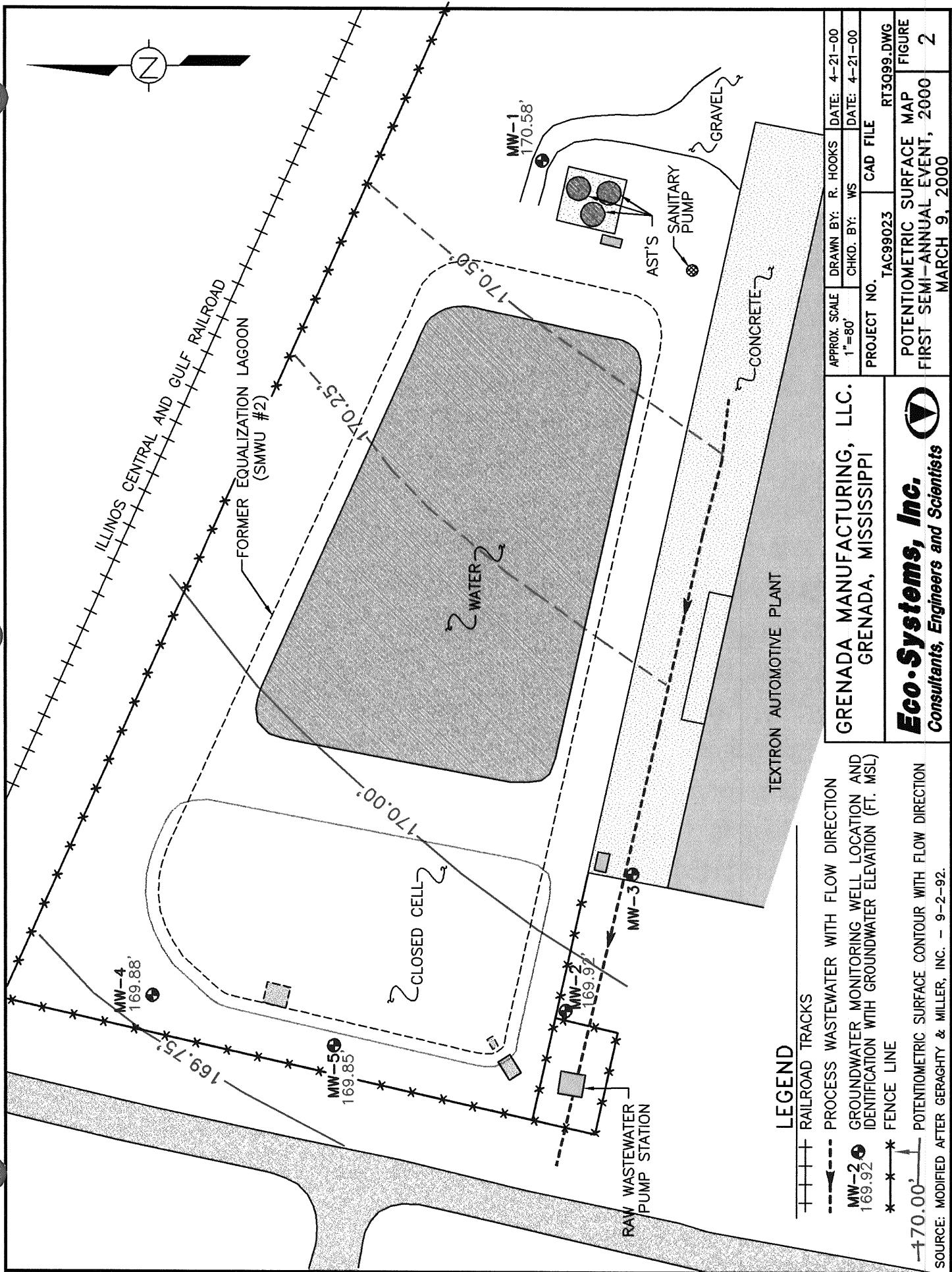


PROJECT NO.	TAC9023	CAD FILE	RTQ399.DWG
APPROX. SCALE	1"=80'	DRAWN BY:	R. HOOKS DATE: 4-21-00
CHKD. BY:	WS	CHKD. BY:	WS DATE: 4-21-00

Eco-Systems, Inc.
Consultants, Engineers and Scientists

GROUNDWATER ANALYTICAL RESULTS OF CONCERN
FIRST SEMI-ANNUAL EVENT, 2000

FIGURE 1



APPENDIX A

GROUNDWATER COLLECTION REPORTS

GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron SI' 2000
COLLECTOR (S) Wade Steinriede

FIELD LOG

LOCATION Grenada, MS
WELL IDENTIFICATION MW-1

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 14.6 TOP OF CASING TO BOTTOM _____
ELEVATION TOP OF CASING _____

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 3-9-00 1102

METHOD OF EVACUATION: Peristaltic Pump - Low Flow / Low Stress

PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 14.74 a/b 39-00 17.5

TOTAL GALLONS EVACUATED: 0.5 gal

WATER LEVEL FOLLOWING EVACUATION: 14.74

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 3-9-00 1115

METHOD OF SAMPLING: Peristaltic Pump

WATER LEVEL FOLLOWING SAMPLING: 14.74

TYPE OF SAMPLE: GW GRAB: COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA

TIME: <u>1111</u>	CUMULATIVE VOLUME: <u>.25</u>	TEMP.: <u>20</u>	pH: <u>6.6</u>	CONDUCTIVITY: <u>480</u>	TURBIDITY: <u>4.4</u>
TIME: <u>1112</u>	CUMULATIVE VOLUME: <u>.30</u>	TEMP.: <u></u>	pH: <u>5.9</u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u></u>
TIME: <u>1113</u>	CUMULATIVE VOLUME: <u>.35</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u></u>
TIME: <u>1114</u>	CUMULATIVE VOLUME: <u>.40</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u></u>
TIME: <u>1115</u>	CUMULATIVE VOLUME: <u>.45</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u>2.55</u>
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Cloudy, 265°F

SAMPLE IDENTIFICATION: TAC-SWMU2-GW-01-05

CONTAINERS AND PRESERVATIVES: 3 NOA HCl, 1 500 ml Plastic HNO3, 2 1L BR NP

COMMENTS AND OBSERVATIONS: _____

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: Carol Bullock

DATE:

3-9-00

Eco-Systems, Inc.



GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron SI'2000
COLLECTOR (S) Wade Steinriede

FIELD LOG
LOCATION Grenada, MS
WELL IDENTIFICATION MW-2

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 14.64 TOP OF CASING TO BOTTOM _____
ELEVATION TOP OF CASING _____

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 3-9-00 1200

METHOD OF EVACUATION: Peristaltic Pump - Low Flow/ Low Stress

PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 15.0

TOTAL GALLONS EVACUATED: 2.5 gal

WATER LEVEL FOLLOWING EVACUATION: 14.72

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 3-9-00 1220

METHOD OF SAMPLING: Peristaltic Pump

WATER LEVEL FOLLOWING SAMPLING: 14.72

TYPE OF SAMPLE: GW GRAB: COMPOSITE: OTHER:

SAMPLE REPRESENTATIVENESS DATA

TIME: 1205 CUMULATIVE VOLUME: 0.5 TEMP.: 20 pH: 5.5 CONDUCTIVITY: 410 TURBIDITY: 1.69

TIME: 1206 CUMULATIVE VOLUME: 0.7 TEMP.: 20 pH: 5.5 CONDUCTIVITY: 410 TURBIDITY: 1.69

TIME: 1207 CUMULATIVE VOLUME: 0.85 TEMP.: 20 pH: 5.4 CONDUCTIVITY: 430 TURBIDITY: 1.69

TIME: 1209 CUMULATIVE VOLUME: 1.0 TEMP.: 20 pH: 5.4 CONDUCTIVITY: 430 TURBIDITY: 1.69

TIME: 1210 CUMULATIVE VOLUME: 1.2 TEMP.: 20 pH: 5.4 CONDUCTIVITY: 430 TURBIDITY: 2.65

TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Sunny, ~80°

SAMPLE IDENTIFICATION: TAC-SWMU2-GW-02-05

CONTAINERS AND PRESERVATIVES: 3 500 mL P HNO₃, 6 1L BRNP, 9 VOA HCl

COMMENTS AND OBSERVATIONS: Sampled w/ MS / MSD

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: Carol Bullock

DATE: 3-9-00

Eco-Systems, Inc.



GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron Sl' 2000
 COLLECTOR (S) Wade Steinriede

FIELD LOG LOCATION Grenada, MS
 WELL IDENTIFICATION MW-4 Cb^B 1.00 MW-4

MONITORING WELL DATA
 TOP OF CASING TO STATIC WATER LEVEL 14.45 TOP OF CASING TO BOTTOM _____
 ELEVATION TOP OF CASING _____

MONITORING WELL EVACUATION
 EVACUATION: (DATE/TIME) 3-9-00 0943 0930
 METHOD OF EVACUATION: Peristaltic Pump - Low Flow/ Low Stress
 PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 19.5 (AB 3.9' 00) 19.0
 TOTAL GALLONS EVACUATED: 1.5 gal - DRY
 WATER LEVEL FOLLOWING EVACUATION: DRY

MONITORING WELL SAMPLING
 SAMPLING (DATE/TIME): 3-9-00 1245
 METHOD OF SAMPLING: Peristaltic Pump
 WATER LEVEL FOLLOWING SAMPLING: 19.5
 TYPE OF SAMPLE: GW GRAB: X COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA
 TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
 TIME: _____ CUMULATIVE VOLUME: No Metering TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
 TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
 TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
 TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
 TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____

GENERAL INFORMATION
 WEATHER CONDITIONS AT TIMES OF SAMPLING: Sunny, ~80°
 SAMPLE IDENTIFICATION: TAC-SWMV2-GW-04-05
 CONTAINERS AND PRESERVATIVES: 3 100 ml Plastic HNO₃; 1.1 L BR NP
 COMMENTS AND OBSERVATIONS: No metering due to water volume concerns
 RECOMMENDATIONS: _____

CERTIFICATION
 SIGNATURE: Carol Bullock DATE: 3-9-00

GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron SI '2000
 COLLECTOR (S) Wade Steinriede

FIELD LOG
 LOCATION Grenada, MS
 WELL IDENTIFICATION MW-5

MONITORING WELL DATA
 TOP OF CASING TO STATIC WATER LEVEL 14.32 TOP OF CASING TO BOTTOM _____
 ELEVATION TOP OF CASING _____

MONITORING WELL EVACUATION
 EVACUATION: (DATE/TIME) 9-3-00 0943
 METHOD OF EVACUATION: Peristaltic Pump - Low Flow / Low Stress
 PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 16.5
 TOTAL GALLONS EVACUATED: 0.5 gal
 WATER LEVEL FOLLOWING EVACUATION: 14.38

MONITORING WELL SAMPLING
 SAMPLING (DATE/TIME): 9-3-00 0958
 METHOD OF SAMPLING: Peristaltic Pump
 WATER LEVEL FOLLOWING SAMPLING: 14.38
 TYPE OF SAMPLE: GW GRAB: COMPOSITE: _____ OTHER: _____

TIME:	CUMULATIVE VOLUME:	TEMP.:	pH:	CONDUCTIVITY:	TURBIDITY:
<u>0953</u>	<u>0.2</u>	<u>20</u>	<u>6.1</u>	<u>420</u>	<u>3,85</u>
<u>0954</u>	<u>0.25</u>		<u>5.9</u>	<u>420</u>	
<u>0955</u>	<u>0.3</u>		<u>5.9</u>	<u>420</u>	
<u>0956</u>	<u>0.35</u>		<u>5.9</u>	<u>420</u>	<u>4.3</u>
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Cloudy ~65°
 SAMPLE IDENTIFICATION: TAC-SW-MU2-05-05
 CONTAINERS AND PRESERVATIVES: 3 VOL HCl | Metal HNO₃, Plastic, 2 1Liter BR SVFA
 COMMENTS AND OBSERVATIONS: Sample with Duplicate
TAC-SWMU2-GW-05-05 D
 RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: Carol Bullock DATE: 3-09-00

Eco-Systems, Inc.

APPENDIX B

LABORATORY ANALYTICAL DATA SHEETS

Pace Analytical

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
St. Rose, LA 70087

Tel: 504-469-0333
Fax: 504-469-0555

March 24, 2000

Mr. John Ryan
Eco-Systems, Incorporated/MS
439 Katherine Dr.
Suite 2A
Jackson, MS 39208

RE: Pace Project Number: 201187
Client Project ID: Textron

Dear Mr. Ryan:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 10, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Randy Shackelford
Project Manager

Enclosures

Narrative for Project 201187

Volatile Organics

The laboratory was asked to achieve the lowest possible level of dilution. Samples were originally analyzed on instrument L; the system was severely overloaded by several of these samples, adversely affecting subsequent system performance and resulting in low-bias QC for the compound tetrachloroethene. The samples were therefore reanalyzed on a different instrument. The designated QC samples 209656MS and 209657MSD were diluted prior to analysis. Dilutions were required for samples 209651, 209652, 209654, and 209657. Internal standard responses were outside QC limits in sample 209652; reanalysis at a dilution yielded similar results, indicating a matrix effect. Poor surrogate recovery was also noted in the 1:1 run of this sample, due to high levels of analytes and poor internal standard response. Elevated surrogate recovery was observed for sample 209653; reanalysis yielded similar results, indicating a matrix effect. The 1:1 run of sample 209654 ran on instrument L only; therefore, the concentration of tetrachloroethene, trichloroethene, and vinyl chloride were reported based upon dilutions performed on instrument A.



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05

Project: Textron

Lab ID: 209651

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 20:35 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND		10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0	
107-02-8	Acrolein (2-Propenal)	1	ND		10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00	
71-43-2	Benzene	1	ND		5.00	
75-27-4	Bromodichloromethane	1	ND		5.00	
75-25-2	Bromoform	1	ND		5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0	
75-15-0	Carbon disulfide	1	ND		5.00	
56-23-5	Carbon tetrachloride	1	ND		5.00	
108-90-7	Chlorobenzene	1	ND		5.00	
75-00-3	Chloroethane	1	ND		10.0	
67-66-3	Chloroform	1	ND		5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0	
124-48-1	Dibromochloromethane	1	ND		5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0	
75-34-3	1,1-Dichloroethane	1	3.10 J		5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylen)	1	6.00		5.00	
156-60-5	trans-1,2-Dichloroethene	1	29.5		5.00	
78-87-5	1,2-Dichloropropane	1	ND		5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	
123-91-1	1,4-Dioxane	1	ND		500.	
100-41-4	Ethylbenzene	1	ND		5.00	
591-78-6	2-Hexanone	1	ND		10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alco)	1	ND		500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:45



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05

Project: Textron

Lab ID: 209651

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 20:35 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	1.70 J	A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylen	1	ND		5.00	
108-88-3	Toluene	1	ND		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chlor	1	ND		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethene (Trichloroethylene)	10	1330	D1	50.0	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethene)	1	97.3		10.0	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05

Project: Textron

Lab ID: 209651

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:19 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:46



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05

Project: Textron

Lab ID: 209651

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:19 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrène	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:46



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05

Project: Textron

Lab ID: 209651

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:19 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylalkylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:46



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-05-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209651

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:19 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	2.60	J	10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-01-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209653

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 15:35 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:50



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-05

Project: Textron

Lab ID: 209653

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 15:35 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:50



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209653

Project No.: 201187

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 01863

Prep Factor: 1

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 15:35 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05D

Project: Textron

Lab ID: 209652

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:57 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	2.80	J	10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-05

Project: Textron

Lab ID: 209653

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 16:58 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND	M1	10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND	M1	50.0	
107-02-8	Acrolein (2-Propenal)	1	ND	M1	10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND	M1	10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND	M1	5.00	
71-43-2	Benzene	1	ND	M1	5.00	
75-27-4	Bromodichloromethane	1	ND	M1	5.00	
75-25-2	Bromoform	1	ND	M1	5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND	M1	10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND	M1	10.0	
75-15-0	Carbon disulfide	1	ND	M1	5.00	
56-23-5	Carbon tetrachloride	1	ND	M1	5.00	
108-90-7	Chlorobenzene	1	ND	M1	5.00	
75-00-3	Chloroethane	1	ND	M1	10.0	
67-66-3	Chloroform	1	ND	M1	5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND	M1	10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND	M1	50.0	
124-48-1	Dibromochloromethane	1	ND	M1	5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND	M1	5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND	M1	5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND	M1	5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND	M1	5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND	M1	50.0	
75-34-3	1,1-Dichloroethane	1	ND	M1	5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND	M1	5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	ND	M1	5.00	
156-60-5	trans-1,2-Dichloroethene	1	ND	M1	5.00	
78-87-5	1,2-Dichloropropane	1	ND	M1	5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND	M1	5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND	M1	5.00	
123-91-1	1,4-Dioxane	1	ND	M1	500.	
100-41-4	Ethylbenzene	1	ND	M1	5.00	
591-78-6	2-Hexanone	1	ND	M1	10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND	M1	5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND	M1	500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:49



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-05

Project: Textron

Lab ID: 209653

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 16:58 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND	M1	5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	2.30 J	A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND	M1	10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND	M1	10.0	
100-42-4	Styrene	1	ND	M1	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND	M1	5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND	M1	5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND	M1	5.00	
108-88-3	Toluene	1	ND	M1	5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chlor	1	ND	M1	5.00	
79-00-5	1,1,2-Trichloroethane	1	ND	M1	5.00	
79-01-6	Trichloroethene (Trichloroethylene)	1	102.	M1	5.00	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND	M1	5.00	
96-18-4	1,2,3-Trichloropropane	1	ND	M1	5.00	
108-05-4	Vinyl acetate	1	ND	M1	10.0	
75-01-4	Vinyl chloride (Chloroethylene)	1	ND	M1	10.0	
1330-20-7	Xylene (total)	1	ND	M1	5.00	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-01-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209653

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Prepared: 13-Mar-00

Received: 10-Mar-00

Analyzed: 15-Mar-00 15:35 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4,6-dinitrophenol (Dino)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:49



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 23-Mar-00 19:44 ACA

Client ID: TAC-SWMU2-GW-05-05D

Project: Textron

Lab ID: 209652

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND	N	10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND	N	50.0	
107-02-8	Acrolein (2-Propenal)	1	ND	N	10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND	N	10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND	N	5.00	
71-43-2	Benzene	1	ND	N	5.00	
75-27-4	Bromodichloromethane	1	ND	N	5.00	
75-25-2	Bromoform	1	ND	N	5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND	N	10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND	N	10.0	
75-15-0	Carbon disulfide	1	ND	N	5.00	
56-23-5	Carbon tetrachloride	1	ND	N	5.00	
108-90-7	Chlorobenzene	1	ND	N	5.00	
75-00-3	Chloroethane	1	ND	N	10.0	
67-66-3	Chloroform	1	ND	N	5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND	N	10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND	N	50.0	
124-48-1	Dibromochloromethane	1	ND	N	5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND	N	5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromi	1	ND	N	5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND	N	5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND	N	5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND	N	50.0	
75-34-3	1,1-Dichloroethane	1	ND	N	5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichlo	1	ND	N	5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylen	1	5.80	N	5.00	
156-60-5	trans-1,2-Dichloroethene	1	30.0	N	5.00	
78-87-5	1,2-Dichloropropane	1	ND	N	5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND	N	5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND	N	5.00	
123-91-1	1,4-Dioxane	1	ND	N	500.	
100-41-4	Ethylbenzene	1	ND	N	5.00	
591-78-6	2-Hexanone	1	ND	N	10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND	N	5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alco	1	ND	N	500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:47



New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05DProject: TextronLab ID: 209652Description: NoneMethod: SW 8260 Appendix IX Volatile OrganicsPrep Factor: 1Leached: n/aClient: ECO-SYSTEMS, INCORPORATED/MSSite: NoneProject No.: 201187

Sample Qu:

Matrix: Water% Moisture: n/aPrep Level: WaterBatch: 01897Units: ug/lTarget List: 8260AP9WATCollected: 09-Mar-00Received: 10-Mar-00

Prepared:

Analyzed: 23-Mar-00 19:44 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND	N	5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	1.90 J	A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND	N	10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND	N	10.0	
100-42-4	Styrene	1	ND	N	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND	N	5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND	N	5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND	N	5.00	
108-88-3	Toluene	1	ND	N	5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chlor	1	ND	N	5.00	
79-00-5	1,1,2-Trichloroethane	1	ND	N	5.00	
79-01-6	Trichloroethene (Trichloroethylene)	10	1330	D1	50.0	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND	N	5.00	
96-18-4	1,2,3-Trichloropropane	1	ND	N	5.00	
108-05-4	Vinyl acetate	1	ND	N	10.0	
75-01-4	Vinyl chloride (Chloroethene)	1	88.4	N	10.0	
1330-20-7	Xylene (total)	1	ND	N	5.00	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05D

Project: Textron

Lab ID: 209652

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:57 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:48



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05D

Project: Textron

Lab ID: 209652

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:57 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:48



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-05D

Project: Textron

Lab ID: 209652

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 14:57 JAM

Prep Factor: 1

Leached: n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:48



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05

Project: Textron

Lab ID: 209654

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prep Factor: 1

Leached: n/a

Prepared:

Analyzed: 14-Mar-00 20:10 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND		10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0	
107-02-8	Acrolein (2-Propenal)	1	ND		10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00	
71-43-2	Benzene	1	1.80 J		5.00	
75-27-4	Bromodichloromethane	1	ND		5.00	
75-25-2	Bromoform	1	ND		5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0	
75-15-0	Carbon disulfide	1	ND		5.00	
56-23-5	Carbon tetrachloride	1	ND		5.00	
108-90-7	Chlorobenzene	1	ND		5.00	
75-00-3	Chloroethane	1	ND		10.0	
67-66-3	Chloroform	1	ND		5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0	
124-48-1	Dibromochloromethane	1	ND		5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0	
75-34-3	1,1-Dichloroethane	1	10.3		5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	25.5		5.00	
156-60-5	trans-1,2-Dichloroethene	1	14.1		5.00	
78-87-5	1,2-Dichloropropane	1	ND		5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	
123-91-1	1,4-Dioxane	1	ND		500.	
100-41-4	Ethylbenzene	1	2.10 J		5.00	
591-78-6	2-Hexanone	1	ND		10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:51



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05

Project: Textron

Lab ID: 209654

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 14-Mar-00 20:10 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	2.10	J A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	10	39.2	J N	50.0	
108-88-3	Toluene	1	25.7		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chlor	1	13.0		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethene (Trichloroethylene)	100	21600	D1	500.	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethylene)	10	173.	N	100.	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209654

Project No.: 201187

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 01863

Prep Factor: 1

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:41 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:51



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05

Project: Textron

Lab ID: 209654

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prep Factor: 1

Leached: n/a

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:41 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	1.90 J		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	ND A7		10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:51



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209654

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:41 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylmethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	10.0	J	25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denoted result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:52



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209654

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Prepared: 13-Mar-00

Received: 10-Mar-00

Analyzed: 15-Mar-00 13:41 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	54.0		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:52



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05 MS

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209656MS

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01897

Method: SW 8260 Appendix IX Volatile Organics

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1

Leached: n/a

Prepared:

Received: 10-Mar-00

Analyzed: 22-Mar-00 18:00 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	100	2810	D6	1000	
75-05-8	Acetonitrile (Methyl cyanide)	100	ND	D6	5000	
107-02-8	Acrolein (2-Propenal)	100	5290	D6	1000	
107-13-1	Acrylonitrile (2-Propenenitrile)	100	5810	D6	1000	
107-05-1	Allyl chloride (3-Chloropropene)	100	ND	D6	500.	
71-43-2	Benzene	100	3640	D6	500.	
75-27-4	Bromodichloromethane	100	4300	D6	500.	
75-25-2	Bromoform	100	6350	D6	500.	
74-83-9	Bromomethane (Methyl bromide)	100	3520	D6	1000	
78-93-3	2-Butanone (Methyl ethyl ketone)	100	2540	D6	1000	
75-15-0	Carbon disulfide	100	3260	D6	500.	
56-23-5	Carbon tetrachloride	100	5140	D6	500.	
108-90-7	Chlorobenzene	100	4370	D6	500.	
75-00-3	Chloroethane	100	2860	D6	1000	
67-66-3	Chloroform	100	3480	D6	500.	
74-87-3	Chloromethane (Methyl chloride)	100	2230	D6	1000	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	100	ND	D6	5000	
124-48-1	Dibromochloromethane	100	5170	D6	500.	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	100	3970	D6	500.	
106-93-4	1,2-Dibromoethane (Ethylene dibromi	100	4940	D6	500.	
74-95-3	Dibromomethane (Methylene bromide)	100	4430	D6	500.	
110-57-6	trans-1,4-Dichloro-2-butene	100	ND	D6	500.	
75-71-8	Dichlorodifluoromethane (Freon 12)	100	ND	D6	5000	
75-34-3	1,1-Dichloroethane	100	2960	D6	500.	
107-06-2	1,2-Dichloroethane (Ethylene dichlo	100	4430	D6	500.	
75-35-4	1,1-Dichloroethene (Dichloroethylen	100	3600	D6	500.	
156-60-5	trans-1,2-Dichloroethene	100	3510	D6	500.	
78-87-5	1,2-Dichloropropane	100	3190	D6	500.	
10061-01-5	cis-1,3-Dichloropropene	100	3720	D6	500.	
10061-02-6	trans-1,3-Dichloropropene	100	3840	D6	500.	
123-91-1	1,4-Dioxane	100	ND	D6	50000	
100-41-4	Ethylbenzene	100	4260	D6	500.	
591-78-6	2-Hexanone	100	3680	D6	1000	
74-88-4	Iodomethane (Methyl iodide)	100	4390	D6	500.	
78-83-1	2-Methyl-1-propanol (iso-Butyl alco	100	ND	D6	50000	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:52



New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MSClient ID: TAC-SWMU2-GW-02-05 MSSite: NoneProject: TextronProject No.: 201187

Sample Qu:

Lab ID: 209656MSMatrix: Water% Moisture: n/aDescription: NonePrep Level: WaterBatch: 01897Method: SW 8260 Appendix IX Volatile OrganicsUnits: ug/lTarget List: 8260AP9WATPrep Factor: 1Leached: n/a

Prepared:

Collected: 09-Mar-00Received: 10-Mar-00Analyzed: 22-Mar-00 18:00 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	100	ND	D6	500.	
75-09-2	Methylene chloride (Dichloromethane)	100	3590	D6	500.	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	2910	D6	1000	
107-12-0	Propionitrile (Ethyl cyanide)	100	ND	D6	1000	
100-42-4	Styrene	100	4460	D6	500.	
630-20-6	1,1,1,2-Tetrachloroethane	100	5030	D6	500.	
79-34-5	1,1,2,2-Tetrachloroethane	100	3490	D6	500.	
127-18-4	Tetrachloroethene (Perchloroethylene)	100	4690	D6	500.	
108-88-3	Toluene	100	3960	D6	500.	
71-55-6	1,1,1-Trichloroethane (Methyl chloroethane)	100	3610	D6	500.	
79-00-5	1,1,2-Trichloroethane	100	4470	D6	500.	
79-01-6	Trichloroethene (Trichloroethylene)	100	28500	D6	500.	
75-69-4	Trichlorofluoromethane (Freon 11)	100	4220	D6	500.	
96-18-4	1,2,3-Trichloropropane	100	3780	D6	500.	
108-05-4	Vinyl acetate	100	2640	D6	1000	
75-01-4	Vinyl chloride (Chloroethene)	100	2620	D6	1000	
1330-20-7	Xylene (total)	100	12900	D6	500.	

52 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:53



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MS

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209656MS

Project No.: 201187

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 01863

Prep Factor: 1

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 12:25 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	37.0		10.0	
208-96-8	Acenaphthylene	1	37.1		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	26.0		10.0	
120-12-7	Anthracene	1	35.0		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	37.3		10.0	
205-99-2	Benzo(b)fluoranthene	1	40.2		10.0	
207-08-09	Benzo(k)fluoranthene	1	32.1		10.0	
191-24-2	Benzo(g,h,i)perylene	1	40.2		10.0	
50-32-8	Benzo(a)pyrene	1	35.1		10.0	
100-51-6	Benzyl alcohol	1	37.6		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	36.2		10.0	
85-68-7	Butylbenzylphthalate	1	40.2		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	39.4		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	36.1		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	34.1		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	28.6		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	39.3		10.0	
91-58-7	2-Chloronaphthalene	1	37.3		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	35.5		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	36.7		10.0	
218-01-9	Chrysene	1	37.1		10.0	
53-70-3	Dibenz(a,h)anthracene	1	39.8		10.0	
132-64-9	Dibenzofuran	1	38.0		10.0	
84-74-2	Di-n-butylphthalate	1	36.4		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz)	1	31.9		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz)	1	31.3		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz)	1	32.4		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	9.10 J		20.0	
120-83-2	2,4-Dichlorophenol	1	39.1		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:53



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MS

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209656MS

Project No.: 201187

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 01863

Prep Factor: 1

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 12:25 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	36.2		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	30.6		10.0	
131-11-3	Dimethylphthalate	1	37.4		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	40.9		25.0	
51-28-5	2,4-Dinitrophenol	1	42.6		25.0	
121-14-2	2,4-Dinitrotoluene	1	37.0		10.0	
606-20-2	2,6-Dinitrotoluene	1	38.1		10.0	
117-84-0	Di-n-octylphthalate	1	37.7		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	43.3		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	34.2		10.0	
86-73-7	Fluorene	1	36.8		10.0	
118-74-1	Hexachlorobenzene	1	36.9		10.0	
87-68-3	Hexachlorobutadiene	1	35.5		10.0	
77-47-4	Hexachlorocyclopentadiene	1	13.6		10.0	
67-72-1	Hexachloroethane	1	29.9		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	39.0		10.0	
78-59-1	Isophorone	1	38.7		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	40.7		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	34.8		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	34.4	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	34.4		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:53



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MS

Project: Textron

Lab ID: 209656MS

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 12:25 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	38.0		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	33.4		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	36.2		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	22.6	J	25.0	
98-95-3	Nitrobenzene	1	36.8		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	39.8		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	37.0		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	30.2		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	21.4	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	34.4		10.0	
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	49.2		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	36.4		10.0	
108-95-2	Phenol	1	32.0		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	39.1		10.0	
110-86-1	Pyridine	1	30.0		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:54



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05 MS

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209656MS

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 12:25 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	92.2		10.0	
95-95-4	2,4,5-Trichlorophenol	1	38.9		25.0	
88-06-2	2,4,6-Trichlorophenol	1	40.0		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MSD

Project: Textron

Lab ID: 209657MSD

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 18:31 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	100	3320	D6	1000	
75-05-8	Acetonitrile (Methyl cyanide)	100	ND	D6	5000	
107-02-8	Acrolein (2-Propenal)	100	6640	D6	1000	
107-13-1	Acrylonitrile (2-Propenenitrile)	100	6880	D6	1000	
107-05-1	Allyl chloride (3-Chloropropene)	100	ND	D6	500.	
71-43-2	Benzene	100	3980	D6	500.	
75-27-4	Bromodichloromethane	100	4420	D6	500.	
75-25-2	Bromoform	100	6180	D6	500.	
74-83-9	Bromomethane (Methyl bromide)	100	3800	D6	1000	
78-93-3	2-Butanone (Methyl ethyl ketone)	100	3450	D6	1000	
75-15-0	Carbon disulfide	100	3620	D6	500.	
56-23-5	Carbon tetrachloride	100	5290	D6	500.	
108-90-7	Chlorobenzene	100	4570	D6	500.	
75-00-3	Chloroethane	100	3290	D6	1000	
67-66-3	Chloroform	100	3880	D6	500.	
74-87-3	Chloromethane (Methyl chloride)	100	2700	D6	1000	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	100	ND	D6	5000	
124-48-1	Dibromochloromethane	100	5320	D6	500.	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	100	4670	D6	500.	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	100	5090	D6	500.	
74-95-3	Dibromomethane (Methylene bromide)	100	4640	D6	500.	
110-57-6	trans-1,4-Dichloro-2-butene	100	ND	D6	500.	
75-71-8	Dichlorodifluoromethane (Freon 12)	100	ND	D6	5000	
75-34-3	1,1-Dichloroethane	100	3480	D6	500.	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	100	4740	D6	500.	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	100	3950	D6	500.	
156-60-5	trans-1,2-Dichloroethene	100	3900	D6	500.	
78-87-5	1,2-Dichloropropane	100	3530	D6	500.	
10061-01-5	cis-1,3-Dichloropropene	100	4030	D6	500.	
10061-02-6	trans-1,3-Dichloropropene	100	4070	D6	500.	
123-91-1	1,4-Dioxane	100	ND	D6	50000	
100-41-4	Ethylbenzene	100	4400	D6	500.	
591-78-6	2-Hexanone	100	4170	D6	1000	
74-88-4	Iodomethane (Methyl iodide)	100	4620	D6	500.	
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	100	ND	D6	50000	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:54



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MSD

Project: Textron

Lab ID: 209657MSD

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 18:31 ACA

Prep Factor: 1

Leached: n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	100	ND	D6	500.	
75-09-2	Methylene chloride (Dichloromethane)	100	3960	D6	500.	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	3300	D6	1000	
107-12-0	Propionitrile (Ethyl cyanide)	100	ND	D6	1000	
100-42-4	Styrene	100	4600	D6	500.	
630-20-6	1,1,1,2-Tetrachloroethane	100	5110	D6	500.	
79-34-5	1,1,2,2-Tetrachloroethane	100	3940	D6	500.	
127-18-4	Tetrachloroethene (Perchloroethylene)	100	4770	D6	500.	
108-88-3	Toluene	100	4140	D6	500.	
71-55-6	1,1,1-Trichloroethane (Methyl chloroethane)	100	4050	D6	500.	
79-00-5	1,1,2-Trichloroethane	100	4820	D6	500.	
79-01-6	Trichloroethene (Trichloroethylene)	100	28400	D6	500.	
75-69-4	Trichlorofluoromethane (Freon 11)	100	4390	D6	500.	
96-18-4	1,2,3-Trichloropropane	100	4270	D6	500.	
108-05-4	Vinyl acetate	100	3320	D6	1000	
75-01-4	Vinyl chloride (Chloroethylene)	100	3120	D6	1000	
1330-20-7	Xylene (total)	100	13300	D6	500.	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05 MSD

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209657MSD

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:03 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	32.6		10.0	
208-96-8	Acenaphthylene	1	33.0		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	30.0		10.0	
120-12-7	Anthracene	1	34.8		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	34.8		10.0	
205-99-2	Benzo(b)fluoranthene	1	31.9		10.0	
207-08-09	Benzo(k)fluoranthene	1	36.1		10.0	
191-24-2	Benzo(g,h,i)perylene	1	37.4		10.0	
50-32-8	Benzo(a)pyrene	1	33.0		10.0	
100-51-6	Benzyl alcohol	1	30.5		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	36.5		10.0	
85-68-7	Butylbenzylphthalate	1	39.8		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	37.9		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	32.7		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	27.1		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	23.3		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	38.0		10.0	
91-58-7	2-Chloronaphthalene	1	31.0		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	28.1		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	34.4		10.0	
218-01-9	Chrysene	1	35.3		10.0	
53-70-3	Dibenz(a,h)anthracene	1	36.7		10.0	
132-64-9	Dibenzofuran	1	35.6		10.0	
84-74-2	Di-n-butylphthalate	1	36.0		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz	1	24.4		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz	1	23.5		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz	1	24.1		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	11.9 J		20.0	
120-83-2	2,4-Dichlorophenol	1	34.3		10.0	
87-65-0	2,6-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:55



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-02-05 MSD

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209657MSD

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:03 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	35.2		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	27.6		10.0	
131-11-3	Dimethylphthalate	1	35.0		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	38.4		25.0	
51-28-5	2,4-Dinitrophenol	1	39.3		25.0	
121-14-2	2,4-Dinitrotoluene	1	34.9		10.0	
606-20-2	2,6-Dinitrotoluene	1	34.1		10.0	
117-84-0	Di-n-octylphthalate	1	35.8		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	41.8		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	35.9		10.0	
86-73-7	Fluorene	1	34.1		10.0	
118-74-1	Hexachlorobenzene	1	37.5		10.0	
87-68-3	Hexachlorobutadiene	1	30.0		10.0	
77-47-4	Hexachlorocyclopentadiene	1	11.4		10.0	
67-72-1	Hexachloroethane	1	22.7		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	36.8		10.0	
78-59-1	Isophorone	1	34.4		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	36.5		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	29.0		10.0	
108-39-4	3-Methylphenol (m-Cresol)	1	29.6	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	29.6		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:55



New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MSClient ID: TAC-SWMU2-GW-02-05 MSDSite: NoneProject: TextronProject No.: 201187

Sample Qu:

Lab ID: 209657MSDMatrix: Water% Moisture: n/aDescription: NonePrep Level: WaterBatch: 01863Method: SW 8270 Appendix IX Semivolatile OrganicsUnits: ug/lTarget List: 8270AP9WATPrep Factor: 1Leached: n/aCollected: 09-Mar-00Received: 10-Mar-00Prepared: 13-Mar-00Analyzed: 15-Mar-00 13:03 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	31.5		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	31.4		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	33.7		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	25.7		25.0	
98-95-3	Nitrobenzene	1	29.6		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	33.1		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	35.4		25.0	
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiemethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	22.5		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	24.7	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	28.6		10.0	
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	48.4		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	36.3		10.0	
108-95-2	Phenol	1	27.6		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	37.2		10.0	
110-86-1	Pyridine	1	25.0		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:55



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-05 MSD

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209657MSD

Project No.: 201187

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 01863

Prep Factor: 1

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 13:03 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	71.2		10.0	
95-95-4	2,4,5-Trichlorophenol	1	33.2		25.0	
88-06-2	2,4,6-Trichlorophenol	1	36.6		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND		10.0	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-05

Project: Textron

Lab ID: 209658

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 23-Mar-00 17:41 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND		10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0	
107-02-8	Acrolein (2-Propenal)	1	ND		10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00	
71-43-2	Benzene	1	ND		5.00	
75-27-4	Bromodichloromethane	1	ND		5.00	
75-25-2	Bromoform	1	ND		5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0	
75-15-0	Carbon disulfide	1	ND		5.00	
56-23-5	Carbon tetrachloride	1	ND		5.00	
108-90-7	Chlorobenzene	1	ND		5.00	
75-00-3	Chloroethane	1	ND		10.0	
67-66-3	Chloroform	1	ND		5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0	
124-48-1	Dibromochloromethane	1	ND		5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0	
75-34-3	1,1-Dichloroethane	1	ND		5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	4.30 J		5.00	
156-60-5	trans-1,2-Dichloroethene	1	15.9		5.00	
78-87-5	1,2-Dichloropropane	1	ND		5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	
123-91-1	1,4-Dioxane	1	ND		500.	
100-41-4	Ethylbenzene	1	ND		5.00	
591-78-6	2-Hexanone	1	ND		10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size. Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:56



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-05

Project: Textron

Lab ID: 209658

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prep Factor: 1

Leached: n/a

Prepared:

Analyzed: 23-Mar-00 17:41 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	2.20	J A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00	
108-88-3	Toluene	1	ND		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chloroethane)	1	ND		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethene (Trichloroethylene)	10	232.	D1	50.0	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethylene)	1	73.0		10.0	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:56



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-05

Project: Textron

Lab ID: 209658

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 16:14 JAM

Prep Factor: 1 **Leached:** n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND	P11	11.8	
208-96-8	Acenaphthylene	1	ND	P11	11.8	
98-86-2	Acetophenone	1	ND	P11	11.8	
53-96-3	2-Acetylaminofluorene	1	ND	P11	11.8	
92-67-1	4-Aminobiphenyl	1	ND	P11	11.8	
62-53-3	Aniline (Benzeneamine)	1	ND	P11	11.8	
120-12-7	Anthracene	1	ND	P11	11.8	
140-57-8	Aramite	1	ND	P11	11.8	
56-55-3	Benzo(a)anthracene	1	ND	P11	11.8	
205-99-2	Benzo(b)fluoranthene	1	ND	P11	11.8	
207-08-09	Benzo(k)fluoranthene	1	ND	P11	11.8	
191-24-2	Benzo(g,h,i)perylene	1	ND	P11	11.8	
50-32-8	Benzo(a)pyrene	1	ND	P11	11.8	
100-51-6	Benzyl alcohol	1	ND	P11	11.8	
101-55-3	4-Bromophenyl phenyl ether	1	ND	P11	11.8	
85-68-7	Butylbenzylphthalate	1	ND	P11	11.8	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND	P11	11.8	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND	P11	11.8	
111-91-1	bis(2-Chloroethoxy)methane	1	ND	P11	11.8	
111-44-4	bis(2-Chloroethyl) ether	1	ND	P11	11.8	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND	P11	11.8	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	ND	P11	11.8	
91-58-7	2-Chloronaphthalene	1	ND	P11	11.8	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND	P11	11.8	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND	P11	11.8	
218-01-9	Chrysene	1	ND	P11	11.8	
53-70-3	Dibenz(a,h)anthracene	1	ND	P11	11.8	
132-64-9	Dibenzofuran	1	ND	P11	11.8	
84-74-2	Di-n-butylphthalate	1	ND	P11	11.8	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz)	1	ND	P11	11.8	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz)	1	ND	P11	11.8	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz)	1	ND	P11	11.8	
91-94-1	3,3'-Dichlorobenzidine	1	ND	P11	23.6	
120-83-2	2,4-Dichlorophenol	1	ND	P11	11.8	
87-65-0	2,6-Dichlorophenol	1	ND	P11	11.8	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:57



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-05

Project: Textron

Lab ID: 209658

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 16:14 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
84-66-2	Diethylphthalate	1	ND	P11	11.8	
60-11-7	p-(Dimethylamino)azobenzene	1	ND	P11	11.8	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND	P11	11.8	
119-93-7	3,3'-Dimethylbenzidine	1	ND	P11	11.8	
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND	P11	11.8	
105-67-9	2,4-Dimethylphenol	1	ND	P11	11.8	
131-11-3	Dimethylphthalate	1	ND	P11	11.8	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND	P11	11.8	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND	P11	29.5	
51-28-5	2,4-Dinitrophenol	1	ND	P11	29.5	
121-14-2	2,4-Dinitrotoluene	1	ND	P11	11.8	
606-20-2	2,6-Dinitrotoluene	1	ND	P11	11.8	
117-84-0	Di-n-octylphthalate	1	ND	P11	11.8	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND	P11	11.8	
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND	P11	11.8	
62-50-0	Ethyl methanesulfonate	1	ND	P11	11.8	
206-44-0	Fluoranthene	1	ND	P11	11.8	
86-73-7	Fluorene	1	ND	P11	11.8	
118-74-1	Hexachlorobenzene	1	ND	P11	11.8	
87-68-3	Hexachlorobutadiene	1	ND	P11	11.8	
77-47-4	Hexachlorocyclopentadiene	1	ND	P11	11.8	
67-72-1	Hexachloroethane	1	ND	P11	11.8	
70-30-4	Hexachlorophene	1	ND	P11	11.8	
1888-71-7	Hexachloropropene	1	ND	P11	11.8	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND	P11	11.8	
78-59-1	Isophorone	1	ND	P11	11.8	
120-58-1	Isosafrole	1	ND	P11	11.8	
91-80-5	Methapyrilene	1	ND	P11	11.8	
56-49-5	3-Methylcholanthrene	1	ND	P11	11.8	
80-62-6	Methyl methacrylate	1	ND	P11	11.8	
66-27-3	Methyl methanesulfonate	1	ND	P11	11.8	
91-57-6	2-Methylnaphthalene	1	ND	P11	11.8	
95-48-7	2-Methylphenol (o-Cresol)	1	ND	P11	11.8	
108-39-4	3-Methylphenol (m-Cresol)	1	ND	P11 A7	11.8	
106-44-5	4-Methylphenol (p-Cresol)	1	ND	P11	11.8	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:57



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-05

Project: Textron

Lab ID: 209658

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01863

Units: ug/l

Target List: 8270AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 16:14 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
91-20-3	Naphthalene	1	ND	P11	11.8	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND	P11	11.8	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND	P11	11.8	
130-15-4	1,4-Naphthoquinone	1	ND	P11	59.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND	P11	29.5	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND	P11	29.5	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND	P11	29.5	
98-95-3	Nitrobenzene	1	ND	P11	11.8	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND	P11	11.8	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND	P11	29.5	
56-57-5	4-Nitroquinoline-1-oxide	1	ND	P11	11.8	
924-16-3	N-Nitrosodi-n-butylamine	1	ND	P11	11.8	
55-18-5	N-Nitrosodiethylamine	1	ND	P11	11.8	
62-75-9	N-Nitrosodimethylamine	1	ND	P11	11.8	
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	P11 A10	11.8	
621-64-7	N-Nitroso-di-n-propylamine	1	ND	P11	11.8	
10595-95-6	N-Nitrosomethylethylamine	1	ND	P11	11.8	
59-89-2	N-Nitrosomorpholine	1	ND	P11	11.8	
100-75-4	N-Nitrosopiperidine	1	ND	P11	11.8	
930-55-2	N-Nitrosopyrrolidine	1	ND	P11	11.8	
99-55-8	5-Nitro-o-toluidine	1	ND	P11	11.8	
608-93-5	Pentachlorobenzene	1	ND	P11	11.8	
76-01-7	Pentachloroethane	1	ND	P11	11.8	
82-68-8	Pentachloronitrobenzene	1	ND	P11	11.8	
87-86-5	Pentachlorophenol	1	ND	P11	29.5	
62-44-2	Phenacetin	1	ND	P11	11.8	
85-01-8	Phenanthrene	1	ND	P11	11.8	
108-95-2	Phenol	1	ND	P11	11.8	
106-50-3	p-Phenylenediamine	1	ND	P11	11.8	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND	P11	11.8	
23950-58-5	Pronamide	1	ND	P11	11.8	
129-00-0	Pyrene	1	ND	P11	11.8	
110-86-1	Pyridine	1	ND	P11	11.8	
94-59-7	Safrole	1	ND	P11	11.8	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND	P11	11.8	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:57



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-GW-04-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209658

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01863

Method: SW 8270 Appendix IX Semivolatile Organics

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 16:14 JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND	P11	11.8	
95-53-4	o-Toluidine	1	ND	P11	11.8	
120-82-1	1,2,4-Trichlorobenzene	1	ND	P11	11.8	
95-95-4	2,4,5-Trichlorophenol	1	ND	P11	29.5	
88-06-2	2,4,6-Trichlorophenol	1	ND	P11	11.8	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro)	1	ND	P11	11.8	

111 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client ID: TAC-SWMU2-TB-05

Project: Textron

Lab ID: 209659

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Project No.: 201187

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 01897

Units: ug/l

Target List: 8260AP9WAT

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 16:27 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND		10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0	
107-02-8	Acrolein (2-Propenal)	1	ND		10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00	
71-43-2	Benzene	1	ND		5.00	
75-27-4	Bromodichloromethane	1	ND		5.00	
75-25-2	Bromoform	1	ND		5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0	
75-15-0	Carbon disulfide	1	ND		5.00	
56-23-5	Carbon tetrachloride	1	ND		5.00	
108-90-7	Chlorobenzene	1	ND		5.00	
75-00-3	Chloroethane	1	ND		10.0	
67-66-3	Chloroform	1	ND		5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0	
124-48-1	Dibromochloromethane	1	ND		5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0	
75-34-3	1,1-Dichloroethane	1	ND		5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	ND		5.00	
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	
78-87-5	1,2-Dichloropropane	1	ND		5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	
123-91-1	1,4-Dioxane	1	ND		500.	
100-41-4	Ethylbenzene	1	ND		5.00	
591-78-6	2-Hexanone	1	ND		10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00	
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500.	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:58



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Protocol

Client: ECO-SYSTEMS, INCORPORATED/MS

Client ID: TAC-SWMU2-TB-05

Site: None

Project: Textron

Project No.: 201187

Sample Qu:

Lab ID: 209659

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 01897

Method: SW 8260 Appendix IX Volatile Organics

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1

Leached: n/a

Collected: 09-Mar-00

Received: 10-Mar-00

Prepared:

Analyzed: 22-Mar-00 16:27 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	1.80 J	A11	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00	
108-88-3	Toluene	1	ND		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chloroethane)	1	ND		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethylene (Trichloroethylene)	1	ND		5.00	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethylene)	1	ND		10.0	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-05-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209651

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

Parameter Name	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 11:57	KJR
Barium	SW 6010	01952	1	ND		ug/l	200.	21-Mar-00	24-Mar-00 11:57	KJR
Cadmium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 11:57	KJR
Chromium	SW 6010	01952	1	12.0		ug/l	10.0	21-Mar-00	24-Mar-00 11:57	KJR
Lead	SW 6010	01952	1	ND		ug/l	3.00	21-Mar-00	24-Mar-00 11:57	KJR
Mercury	SW 7470	01903	1	ND		ug/l	0.200	22-Mar-00	22-Mar-00 11:11	KJR
Selenium	SW 6010	01952	1	5.20		ug/l	5.00	21-Mar-00	24-Mar-00 11:57	KJR
Silver	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 11:56	KJR

8 parameter(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-05-05D

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209652

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:01	KJR
Barium	SW 6010	01952	1	ND		ug/l	200.	21-Mar-00	24-Mar-00 12:01	KJR
Cadmium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:01	KJR
Chromium	SW 6010	01952	1	10.2		ug/l	10.0	21-Mar-00	24-Mar-00 12:01	KJR
Lead	SW 6010	01952	1	ND		ug/l	3.00	21-Mar-00	24-Mar-00 12:01	KJR
Mercury	SW 7470	01903	1	ND		ug/l	0.200	22-Mar-00	22-Mar-00 11:13	KJR
Selenium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:01	KJR
Silver	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:01	KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:19:59



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Single Sample - Inorganic Parameters

Phone: 504.469.0333
Fax: 504.469.0555

Client ID: TAC-SWMU2-GW-01-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209653

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

Parameter Name	Method	Batch	DF	Result	Qu	Reporting Units	Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:06	KJR
Barium	SW 6010	01952	1	ND		ug/l	200.	21-Mar-00	24-Mar-00 12:06	KJR
Cadmium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:06	KJR
Chromium	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:06	KJR
Lead	SW 6010	01952	1	ND		ug/l	3.00	21-Mar-00	24-Mar-00 12:06	KJR
Mercury	SW 7470	01903	1	ND		ug/l	0.200	22-Mar-00	22-Mar-00 11:15	KJR
Selenium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:06	KJR
Silver	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:06	KJR

8 parameter(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-02-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209654

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

Parameter Name	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 11:36	KJR
Barium	SW 6010	01952	1	ND		ug/l	200.	21-Mar-00	24-Mar-00 11:36	KJR
Cadmium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 11:36	KJR
Chromium	SW 6010	01952	1	13200		ug/l	10.0	21-Mar-00	24-Mar-00 11:35	KJR
Lead	SW 6010	01952	1	4.70		ug/l	3.00	21-Mar-00	24-Mar-00 11:36	KJR
Mercury	SW 7470	01903	1	ND		ug/l	0.200	22-Mar-00	22-Mar-00 11:05	KJR
Selenium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 11:36	KJR
Silver	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 11:35	KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:20:00



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-02-05 MS

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209656S

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

Parameter Name	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	1850		ug/l	10.0	21-Mar-00	24-Mar-00 11:40	KJR
Barium	SW 6010	01952	1	1950		ug/l	200.	21-Mar-00	24-Mar-00 11:40	KJR
Cadmium	SW 6010	01952	1	45.9		ug/l	5.00	21-Mar-00	24-Mar-00 11:40	KJR
Chromium	SW 6010	01952	1	13200		ug/l	10.0	21-Mar-00	24-Mar-00 11:40	KJR
Lead	SW 6010	01952	1	480.		ug/l	3.00	21-Mar-00	24-Mar-00 11:40	KJR
Mercury	SW 7470	01903	1	0.770		ug/l	0.200	22-Mar-00	22-Mar-00 11:07	KJR
Selenium	SW 6010	01952	1	1670		ug/l	5.00	21-Mar-00	24-Mar-00 11:40	KJR
Silver	SW 6010	01952	1	62.0		ug/l	10.0	21-Mar-00	24-Mar-00 11:40	KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/24/00 17:20:00



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-02-05 MSD

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209657SD

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	1870		ug/l	10.0	21-Mar-00	24-Mar-00 11:47	KJR
Barium	SW 6010	01952	1	2050		ug/l	200.	21-Mar-00	24-Mar-00 11:47	KJR
Cadmium	SW 6010	01952	1	46.5		ug/l	5.00	21-Mar-00	24-Mar-00 11:47	KJR
Chromium	SW 6010	01952	1	13600		ug/l	10.0	21-Mar-00	24-Mar-00 11:47	KJR
Lead	SW 6010	01952	1	486.		ug/l	3.00	21-Mar-00	24-Mar-00 11:47	KJR
Mercury	SW 7470	01903	1	1.00		ug/l	0.200	22-Mar-00	22-Mar-00 11:09	KJR
Selenium	SW 6010	01952	1	1690		ug/l	5.00	21-Mar-00	24-Mar-00 11:47	KJR
Silver	SW 6010	01952	1	62.6		ug/l	10.0	21-Mar-00	24-Mar-00 11:47	KJR

8 parameter(s) reported



Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-04-05

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: Textron

Site: None

Lab ID: 209658

Project No.: 201187

Description: None

Matrix: Water

%Moisture: n/a

Collected: 3/9/00

Received: 3/10/00

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:11	KJR
Barium	SW 6010	01952	1	ND		ug/l	200.	21-Mar-00	24-Mar-00 12:11	KJR
Cadmium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:11	KJR
Chromium	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:11	KJR
Lead	SW 6010	01952	1	ND		ug/l	3.00	21-Mar-00	24-Mar-00 12:11	KJR
Mercury	SW 7470	01903	1	ND		ug/l	0.200	22-Mar-00	22-Mar-00 11:17	KJR
Selenium	SW 6010	01952	1	ND		ug/l	5.00	21-Mar-00	24-Mar-00 12:11	KJR
Silver	SW 6010	01952	1	ND		ug/l	10.0	21-Mar-00	24-Mar-00 12:11	KJR

8 parameter(s) reported

Pace Analytical Services, Inc. - New Orleans
Laboratory Quality Control Definitions

Our laboratory employs quality control (QC) measures to ensure the quality of our analytical data by defining its accuracy and precision. Presentation of the QC data with the report allows the data user the opportunity to evaluate those results and to gauge the method performance. In order to assist the understanding of these data, routine components of our QC program are defined below.

BATCH - A batch is a group of 20 samples or less of a given matrix and analysis by a specific protocol or analytical method.

BLANK - A method blank is a "clean" laboratory sample carried through the entire analytical process. One or more method blanks are prepared with each batch of samples. The analysis of method blanks demonstrates that method interferences caused by contaminants, reagents and glassware are known and minimized. A method blank should not contain any analytes of interest above the reporting limit. There are method allowances for common laboratory artifacts such as methylene chloride, acetone, and bis-2-ethylhexyl phthalate.

LABORATORY CONTROL SPIKE - A laboratory control spike (LCS or blank spike) is a blank which has been spiked with known concentrations of target analytes. The LCS is carried through the entire analytical process. One or more LCS are prepared with each batch of samples. The percent recovery of the spiked analytes provides a measure of the accuracy of the analytical process in the absence of matrix effects.

MATRIX SPIKE - A matrix spike (MS) is a client sample which is spiked with known concentrations of target analytes. The MS is carried through the entire analytical process. One or more matrix spikes are prepared with every batch of samples. For organic methods, a matrix spike duplicate (MSD) is also prepared. The percent recovery of the spiked analytes provides a measure of the method accuracy in the selected sample and matrix.

DUPLICATE - A duplicate is a sample for which replicate aliquots are carried through the entire analytical process. Comparison of the original results to those of the duplicate results provides a measure of the method precision in the sample and matrix. By convention, precision is measured for inorganic analyses using a sample and a sample duplicate, whereas for organics analyses, an MS/MSD are used.

SURROGATE - A surrogate is a non-target analyte which is added to all samples and QC samples prior to extraction or analysis. The percent recovery of the surrogate provides a measure of the method accuracy in each sample tested. Surrogates are used for organics methods only.

QC LIMITS - QC limits specify the expected percent recovery range for a spiked compound. QC limits may be set by method criteria or calculated from laboratory generated data. For many methods, these limits are advisory and do not require corrective action if exceeded.



Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Project No.: 201187

Method: Water GC/MS Volatile Organics

Batch: 01897

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone (2-Propanone, Dimethyl keto)	50.00	82			5000.00	56	66	17	17	7 - 173	1 - 183	25	
Acetone (2-Propanone, Dimethyl keto)	50.00	86			50.00					7 - 173	1 - 183	25	
Acrolein (2-Propenal)	100.00	72			10000.00	53	66	23	23	50 - 150	9 - 175	25	
Acrylonitrile (2-Propenenitrile)	100.00	78			10000.00	58	69	17	17	50 - 150	1 - 200	25	
Benzene	50.00	88			5000.00	73	80	9	9	70 - 131	49 - 152	25	
Benzene	50.00	98			50.00					70 - 131	49 - 152	25	
Bromodichloromethane	50.00	100			5000.00	86	88	3	3	65 - 139	66 - 145	25	
Bromodichloromethane	50.00	92			50.00					65 - 139	66 - 145	25	
Bromoform	50.00	152			5000.00	127	124	3	3	55 - 144	50 - 150	25	Q4
Bromoform	50.00	94			50.00					55 - 144	50 - 150	25	
Bromomethane (Methyl bromide)	50.00	86			5000.00	70	76	8	8	42 - 157	37 - 168	25	
Bromomethane (Methyl bromide)	50.00	102			50.00					42 - 157	37 - 168	25	
2-Butanone (Methyl ethyl ketone)	50.00	80			50.00					18 - 175	7 - 189	25	
2-Butanone (Methyl ethyl ketone)	50.00	74			5000.00	51	69	30	30	18 - 175	7 - 189	25	
Carbon disulfide	50.00	80			5000.00	65	72	10	10	52 - 133	43 - 152	25	
Carbon disulfide	50.00	92			50.00					52 - 133	43 - 152	25	
Carbon tetrachloride	50.00	118			5000.00	103	106	3	3	61 - 149	57 - 166	25	
Carbon tetrachloride	50.00	85			50.00					61 - 149	57 - 166	25	
Chlorobenzene	50.00	92			50.00					71 - 126	71 - 133	25	
Chlorobenzene	50.00	102			5000.00	87	91	4	4	71 - 126	71 - 133	25	
Chloroethane	50.00	71			5000.00	57	66	14	14	35 - 168	32 - 181	25	
Chloroethane	50.00	106			50.00					35 - 168	32 - 181	25	
Chloroform	50.00	85			5000.00	70	78	11	11	73 - 133	70 - 141	25	
Chloroform	50.00	96			50.00					73 - 133	70 - 141	25	
Chloromethane (Methyl chloride)	50.00	57			5000.00	45	54	19	19	1 - 174	1 - 188	25	
Chloromethane (Methyl chloride)	50.00	103			50.00					1 - 174	1 - 188	25	
Dibromochloromethane	50.00	89			50.00					65 - 138	63 - 143	25	
Dibromochloromethane	50.00	122			5000.00	103	106	3	3	65 - 138	63 - 143	25	
1,2-Dibromo-3-chloropropane (DBCP)	50.00	98			5000.00	79	93	16	16	50 - 150	50 - 150	25	
1,2-Dibromoethane (Ethylene dibromide)	50.00	121			5000.00	99	102	3	3	50 - 150	61 - 143	25	
Dibromomethane (Methylene bromide)	50.00	107			5000.00	89	93	5	5	50 - 150	50 - 150	25	
1,1-Dichloroethane	50.00	75			5000.00	59	70	16	16	68 - 132	67 - 141	25	Q1
1,1-Dichloroethane	50.00	95			50.00					68 - 132	67 - 141	25	
1,2-Dichloroethane (Ethylene dichloride)	50.00	105			5000.00	89	95	7	7	59 - 152	56 - 159	25	
1,2-Dichloroethane (Ethylene dichloride)	50.00	86			50.00					59 - 152	56 - 159	25	
1,1-Dichloroethene (Dichloroethylene)	50.00	97			50.00					56 - 146	48 - 163	25	
1,1-Dichloroethene (Dichloroethylene)	50.00	89			5000.00	72	79	9	9	56 - 146	48 - 163	25	
trans-1,2-Dichloroethene	50.00	96			50.00					50 - 150	50 - 150	25	
trans-1,2-Dichloroethene	50.00	89			5000.00	70	78	11	11	50 - 150	50 - 150	25	
1,2-Dichloropropane	50.00	80			5000.00	64	71	10	10	71 - 129	72 - 136	25	Q1
1,2-Dichloropropane	50.00	93			50.00					71 - 129	72 - 136	25	

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Project No.: 201187

Method: Water GC/MS Volatile Organics

Batch: 01897

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
cis-1,3-Dichloropropene	50.00	95			5000.00	74	81	8	8	64 - 133	64 - 138	25	
cis-1,3-Dichloropropene	50.00	93			50.00					64 - 133	64 - 138	25	
trans-1,3-Dichloropropene	50.00	97			5000.00	77	81	6	6	58 - 140	55 - 147	25	
trans-1,3-Dichloropropene	50.00	101			50.00					58 - 140	55 - 147	25	
Ethylbenzene	50.00	100			5000.00	85	88	3	3	62 - 131	66 - 135	25	
Ethylbenzene	50.00	99			50.00					62 - 131	66 - 135	25	
2-Hexanone	50.00	108			50.00					29 - 167	12 - 193	25	
2-Hexanone	50.00	98			5000.00	74	83	12	12	29 - 167	12 - 193	25	
Iodomethane (Methyl iodide)	50.00	106			5000.00	88	92	5	5	50 - 150	50 - 150	25	
Methylene chloride (Dichloromethane)	50.00	89			5000.00	67	74	10	10	5 - 175	1 - 155	25	
Methylene chloride (Dichloromethane)	50.00	94			50.00					5 - 175	1 - 155	25	
4-Methyl-2-pentanone (MIBK)	50.00	98			5000.00	58	66	13	13	30 - 162	1 - 155	25	
4-Methyl-2-pentanone (MIBK)	50.00	90			50.00					30 - 162	1 - 155	25	
Styrene	50.00	105			5000.00	89	92	3	3	68 - 129	63 - 137	25	
Styrene	50.00	113			50.00					68 - 129	63 - 137	25	
1,1,1,2-Tetrachloroethane	50.00	116			5000.00	101	102	2	2	50 - 150	50 - 150	25	
1,1,2,2-Tetrachloroethane	50.00	95			5000.00	70	79	12	12	51 - 151	42 - 166	25	
1,1,2,2-Tetrachloroethane	50.00	110			50.00					51 - 151	42 - 166	25	
Tetrachloroethene (Perchloroethylene)	50.00	107			5000.00	94	95	2	2	64 - 131	63 - 139	25	
Tetrachloroethene (Perchloroethylene)	50.00	38			50.00					64 - 131	63 - 139	25	
Toluene	50.00	93			5000.00	79	83	4	4	70 - 130	72 - 135	25	
Toluene	50.00	102			50.00					70 - 130	72 - 135	25	
1,1,1-Trichloroethane (Methyl chlorof	50.00	87			5000.00	72	81	11	11	74 - 133	72 - 142	25	
1,1,1-Trichloroethane (Methyl chlorof	50.00	86			50.00					74 - 133	72 - 142	25	
1,1,2-Trichloroethane	50.00	109			50.00					66 - 138	62 - 145	25	
1,1,2-Trichloroethane	50.00	114			5000.00	89	96	8	8	66 - 138	62 - 145	25	
Trichloroethene (Trichloroethylene)	50.00	106			5000.00	138	136	0	0	71 - 129	71 - 136	25	Q3
Trichloroethene (Trichloroethylene)	50.00	109			50.00					71 - 129	71 - 136	25	
Trichlorofluoromethane (Freon 11)	50.00	98			5000.00	84	88	4	4	75 - 137	74 - 143	25	
Trichlorofluoromethane (Freon 11)	50.00	124			50.00					75 - 137	74 - 143	25	
1,2,3-Trichloropropane	50.00	97			5000.00	76	85	12	12	50 - 150	50 - 150	25	
Vinyl acetate	50.00	71			5000.00	53	66	23	23	50 - 150	50 - 150	25	
Vinyl chloride (Chloroethene)	50.00	112			50.00					20 - 173	12 - 192	25	
Vinyl chloride (Chloroethene)	50.00	65			5000.00	52	62	17	17	20 - 173	12 - 192	25	
Xylene (total)	150.00	105			150.00					65 - 134	67 - 137	25	
Xylene (total)	150.00	100			15000.00	86	89	3	3	65 - 134	67 - 137	25	

77 compound(s) reported

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Project No.: 201187

Method: Water GC/MS Semivolatile Organics

Batch: 01863

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
Acenaphthene	50.00	79			50.00	74	65	13	13	36 - 109	31 - 107	25	
Acenaphthylene	50.00	78			50.00	74	66	12	12	37 - 107	29 - 106	25	
Aniline (Benzeneamine)	50.00	50			50.00	52	60	14	14	50 - 150	50 - 150	25	
Anthracene	50.00	80			50.00	70	70	1	1	40 - 112	35 - 107	25	
Benzoic acid	50.00	73			50.00	89	84	6	6	1 - 142	1 - 162	25	
Benzo(a)anthracene	50.00	80			50.00	75	70	7	7	39 - 116	30 - 114	25	
Benzo(b)fluoranthene	50.00	80			50.00	80	64	23	23	33 - 127	29 - 118	25	
Benzo(k)fluoranthene	50.00	76			50.00	64	72	12	12	25 - 131	26 - 113	25	
Benzo(g,h,i)perylene	50.00	84			50.00	80	75	7	7	32 - 121	23 - 113	25	
Benzo(a)pyrene	50.00	78			50.00	70	66	6	6	40 - 114	31 - 110	25	
Benzyl alcohol	50.00	75			50.00	75	61	21	21	21 - 117	11 - 122	25	
4-Bromophenyl phenyl ether	50.00	79			50.00	72	73	1	1	43 - 113	36 - 112	25	
Butylbenzylphthalate	50.00	87			50.00	80	80	1	1	37 - 121	26 - 125	25	
4-Chloroaniline (p-Chloroaniline)	50.00	86			50.00	79	76	4	4	8 - 107	1 - 100	25	
bis(2-Chloroethoxy)methane	50.00	78			50.00	72	65	10	10	33 - 110	22 - 117	25	
bis(2-Chloroethyl) ether	50.00	68			50.00	68	54	23	23	26 - 112	11 - 118	25	
bis(2-Chloroisopropyl) ether	50.00	58			50.00	57	47	20	20	15 - 119	1 - 127	25	
4-Chloro-3-methylphenol (p-Chloro-m)	50.00	87			50.00	79	76	3	3	34 - 110	17 - 123	25	
2-Chloronaphthalene	50.00	75			50.00	75	62	18	18	37 - 105	31 - 106	25	
2-Chlorophenol (o-Chlorophenol)	50.00	69			50.00	71	56	23	23	28 - 106	22 - 107	25	
4-Chlorophenyl phenyl ether	50.00	82			50.00	73	69	6	6	41 - 109	35 - 107	25	
Chrysene	50.00	79			50.00	74	71	5	5	38 - 113	29 - 111	25	
Dibenz(a,h)anthracene	50.00	85			50.00	80	73	8	8	35 - 120	29 - 112	25	
Dibenzo furan	50.00	80			50.00	76	71	7	7	39 - 110	36 - 104	25	
Di-n-butylphthalate	50.00	81			50.00	73	72	1	1	41 - 116	31 - 115	25	
1,2-Dichlorobenzene (o-Dichlorobenzene)	50.00	60			50.00	64	49	27	27	11 - 91	8 - 90	25	
1,3-Dichlorobenzene (m-Dichlorobenzene)	50.00	59			50.00	63	47	28	28	7 - 91	4 - 89	25	
1,4-Dichlorobenzene (p-Dichlorobenzene)	50.00	58			50.00	65	48	29	29	11 - 87	7 - 86	25	
3,3'-Dichlorobenzidine	50.00	60			50.00	18	24	27	27	1 - 116	1 - 94	25	
2,4-Dichlorophenol	50.00	81			50.00	78	69	13	13	34 - 114	21 - 124	25	
Diethylphthalate	50.00	82			50.00	72	70	3	3	40 - 115	31 - 116	25	
2,4-Dimethylphenol	50.00	66			50.00	61	55	10	10	1 - 110	1 - 129	25	
Dimethylphthalate	50.00	82			50.00	75	70	7	7	42 - 112	33 - 115	25	
4,6-Dinitro-2-methylphenol (4,6-Dinitro-2-methylphenol)	50.00	89			50.00	82	77	6	6	21 - 154	8 - 161	25	
2,4-Dinitrophenol	50.00	87			50.00	85	79	8	8	1 - 174	1 - 190	25	
2,4-Dinitrotoluene	50.00	84			50.00	74	70	6	6	39 - 118	31 - 118	25	
2,6-Dinitrotoluene	50.00	80			50.00	76	68	11	11	40 - 117	34 - 116	25	
Di-n-octylphthalate	50.00	84			50.00	75	72	5	5	28 - 132	24 - 126	25	
bis(2-Ethylhexyl)phthalate	50.00	98			50.00	87	84	4	4	23 - 146	13 - 141	25	
Fluoranthene	50.00	79			50.00	68	72	5	5	41 - 112	32 - 110	25	
Fluorene	50.00	83			50.00	74	68	8	8	40 - 108	33 - 107	25	

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Organic Protocol - Single Batch

Project No.: 201187

Method: Water GC/MS Semivolatile Organics

Batch: 01863

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Hexachlorobenzene	50.00	81			50.00	74	75	2	2	43 - 114	35 - 113	25	
Hexachlorobutadiene	50.00	71			50.00	71	60	17	17	15 - 102	13 - 99	25	
Hexachlorocyclopentadiene	50.00	0			50.00	27	23	18	18	1 - 73	1 - 79	25	
Hexachloroethane	50.00	56			50.00	60	45	27	27	7 - 92	1 - 94	25	
Indeno(1,2,3-cd)pyrene	50.00	82			50.00	78	74	6	6	35 - 117	27 - 110	25	
Isophorone	50.00	83			50.00	77	69	12	12	40 - 110	18 - 130	25	
2-Methylnaphthalene	50.00	80			50.00	78	69	11	11	32 - 109	28 - 107	25	
2-Methylphenol (o-Cresol)	50.00	71			50.00	70	58	18	18	22 - 109	21 - 110	25	
3-Methylphenol (m-Cresol)	50.00	71			50.00	69	59	15	15	50 - 150	50 - 150	25	
4-Methylphenol (p-Cresol)	50.00	71			50.00	69	59	15	15	21 - 109	15 - 112	25	
Naphthalene	50.00	73			50.00	76	63	19	19	27 - 101	21 - 103	25	
2-Nitroaniline (o-Nitroaniline)	50.00	81			50.00	67	63	6	6	33 - 119	25 - 122	25	
3-Nitroaniline (m-Nitroaniline)	50.00	87			50.00	72	67	7	7	30 - 114	12 - 111	25	
4-Nitroaniline (p-Nitroaniline)	50.00	89			50.00	45	51	13	13	34 - 111	19 - 108	25	
Nitrobenzene	50.00	73			50.00	74	59	22	22	24 - 119	6 - 136	25	
2-Nitrophenol (o-Nitrophenol)	50.00	81			50.00	80	66	18	18	30 - 118	15 - 132	25	
4-Nitrophenol (p-Nitrophenol)	50.00	86			50.00	74	71	4	4	23 - 129	7 - 159	25	
N-Nitrosodimethylamine	50.00	62			50.00	60	45	29	29	13 - 110	1 - 121	25	
N-Nitrosodiphenylamine (Diphenylam	50.00	74			50.00	43	49	14	14	37 - 109	20 - 112	25	
N-Nitroso-di-n-propylamine	50.00	71			50.00	69	57	18	18	32 - 107	18 - 114	25	
Pentachlorophenol	50.00	81			50.00	78	77	2	2	32 - 122	26 - 134	25	
Phenanthrene	50.00	79			50.00	73	73	0	0	42 - 112	36 - 109	25	
Phenol	50.00	68			50.00	64	55	15	15	24 - 109	19 - 113	25	
Pyrene	50.00	84			50.00	78	74	5	5	38 - 117	26 - 119	25	
Pyridine	50.00	50			50.00	60	50	18	18	50 - 150	50 - 150	25	
1,2,4-Trichlorobenzene	50.00	73			50.00	76	34	26	26	25 - 98	18 - 101	25	
2,4,5-Trichlorophenol	50.00	83			50.00	78	66	16	16	32 - 120	29 - 121	25	
2,4,6-Trichlorophenol	50.00	85			50.00	80	73	9	9	37 - 115	19 - 135	25	

69 compound(s) reported

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

3/24/00 17:20:03



Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Organic Protocol - Single Batch

Method: Water GC/MS Volatile Organics

Report: 201187

Batch: 01897

Lab ID		Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
01897B1A22	BLANK	83	102	79					
01897B1M21	BLANK	91	90	82					
01897SA22	LCS	101	97	95					
01897SL14	LCS	99	97	94					
2010060		93	91	81					
2010061		91	91	81					
2010062		92	91	81					
2010063		92	91	82					
2010064		93	92	83					
209651		83	99	80					
209651DL	DUP	89	103	91					
209652		104	125	93					
209652DL	DUP	91	110	81					
209653		107	127	99					
209653RE	RE	98	130	98					
209654		93	98	93					
209654DL	DUP	98	109	106					
209654DL2	DUP	85	107	83					
209656MS	MS	85	85	81					
209657MSD	MSD	88	85	86					
209658		100	122	93					
209658DL	DUP	106	127	96					
209659		91	114	89					

QC limits: 81-113 77-123 75-118

- Sur 1: Toluene-d8 (S)
- Sur 2: 4-Bromofluorobenzene (S)
- Sur 3: Dibromofluoromethane (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/24/00 17:20:04



Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Organic Protocol - Single Batch

Method: Water GC/MS Semivolatile Organics

Report: 201187

Batch: 01863

Lab ID		Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
01863B1	BLANK	79	75	87	72	67	87		
01863S1	LCS	80	82	84	68	64	87		
209651		70	69	82	67	65	81		
209652		75	77	83	67	69	82		
209653		53	55	62	44	44	59		
209654		61	64	75	58	54	76		
209656MS	MS	73	76	75	62	60	78		
209657MSD	MSD	63	66	75	51	46	75		
209658		72	69	79	72	71	79		

QC limits: 21-120 26-106 33-141 19-113 11-103 25-136

Sur 1: Nitrobenzene-d5 (S)

Sur 5: 2-Fluorophenol (S)

Sur 2: 2-Fluorobiphenyl (S)

Sur 6: 2,4,6-Tribromophenol (S)

Sur 3: Terphenyl-d14 (S)

Sur 4: Phenol-d5 (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/24/00 17:20:04



Report of Method Blank

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Organic Protocol - Single Batch

Lab ID: 01897B1A22

Description: Water Method Blank

Project No.: 201187

Method: Water GC/MS Volatile Organics

Batch: 01897

Units: ug/l

Prep Factor: 1

Leached:

Prepared:

Analyzed: 22-Mar-00 15:26

ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
67-64-1	Acetone (2-Propanone, Dimethyl keto)	1	ND		10.0
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0
107-02-8	Acrolein (2-Propenal)	1	ND		10.0
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00
71-43-2	Benzene	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
108-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		10.0
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0
124-48-1	Dibromochloromethane	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00
78-87-5	1,2-Dichloropropane	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
123-91-1	1,4-Dioxane	1	ND		500.
100-41-4	Ethylbenzene	1	ND		5.00
591-78-6	2-Hexanone	1	ND		10.0
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500.
126-98-7	Methacrylonitrile	1	ND		5.00
75-09-2	Methylene chloride (Dichloromethane)	1	ND	J	5.00
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/24/00 17:20:06



Report of Method Blank

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Lab ID: 01897B1A22

Description: Water Method Blank

Project No.: 201187

Method: Water GC/MS Volatile Organics

Batch: 01897

Units: ug/l

Prep Factor: 1

Leached:

Prepared:

Analyzed: 22-Mar-00 15:26 ACA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0
100-42-4	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane (Methyl chlor	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00
79-01-6	Trichloroethene (Trichloroethylene)	1	ND		5.00
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00
96-18-4	1,2,3-Trichloropropane	1	ND		5.00
108-05-4	Vinyl acetate	1	ND		10.0
75-01-4	Vinyl chloride (Chloroethylene)	1	ND		10.0
1330-20-7	Xylene (total)	1	ND		5.00

52 compound(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/24/00 17:20:06



Report of Method Blank

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Lab ID: 01863B1

Description: Water Method Blank

Project No.: 201187

Method: Water GC/MS Semivolatile Organics

Batch: 01863

Units: ug/l

Prep Factor: 1

Leached:

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 11:09

JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
83-32-9	Acenaphthene	1	ND		10.0
208-96-8	Acenaphthylene	1	ND		10.0
98-86-2	Acetophenone	1	ND		10.0
53-96-3	2-Acetylaminofluorene	1	ND		10.0
92-67-1	4-Aminobiphenyl	1	ND		10.0
62-53-3	Aniline (Benzeneamine)	1	ND		10.0
65-85-0	Benzoic acid	1	ND		25.0
120-12-7	Anthracene	1	ND		10.0
140-57-8	Aramite	1	ND		10.0
56-55-3	Benzo(a)anthracene	1	ND		10.0
205-99-2	Benzo(b)fluoranthene	1	ND		10.0
207-08-09	Benzo(k)fluoranthene	1	ND		10.0
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0
50-32-8	Benzo(a)pyrene	1	ND		10.0
100-51-6	Benzyl alcohol	1	ND		10.0
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0
85-68-7	Butylbenzylphthalate	1	ND		10.0
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dino)	1	ND		10.0
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m)	1	ND		10.0
91-58-7	2-Chloronaphthalene	1	ND		10.0
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0
218-01-9	Chrysene	1	ND		10.0
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0
132-64-9	Dibenzofuran	1	ND		10.0
84-74-2	Di-n-butylphthalate	1	ND		10.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenz)	1	ND		10.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenz)	1	ND		10.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenz)	1	ND		10.0
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0
120-83-2	2,4-Dichlorophenol	1	ND		10.0
87-65-0	2,6-Dichlorophenol	1	ND		10.0
84-66-2	Diethylphthalate	1	ND		10.0
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes Sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/24/00 17:20:05



Report of Method Blank

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555

Organic Protocol - Single Batch

Lab ID: 01863B1

Description: Water Method Blank

Project No.: 201187

Method: Water GC/MS Semivolatile Organics

Batch: 01863

Units: ug/l

Prep Factor: 1

Leached:

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 11:09

JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0
122-09-8	alpha, alpha- Dimethylphenethylamin	1	ND		10.0
105-67-9	2,4-Dimethylphenol	1	ND		10.0
131-11-3	Dimethylphthalate	1	ND		10.0
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzen	1	ND		10.0
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Din	1	ND		25.0
51-28-5	2,4-Dinitrophenol	1	ND		25.0
121-14-2	2,4-Dinitrotoluene	1	ND		10.0
606-20-2	2,6-Dinitrotoluene	1	ND		10.0
117-84-0	Di-n-octylphthalate	1	ND		10.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0
97-63-2	Ethyl methacrylate (2-Propenoic aci	1	ND		10.0
62-50-0	Ethyl methanesulfonate	1	ND		10.0
206-44-0	Fluoranthene	1	ND		10.0
86-73-7	Fluorene	1	ND		10.0
118-74-1	Hexachlorobenzene	1	ND		10.0
87-68-3	Hexachlorobutadiene	1	ND		10.0
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0
67-72-1	Hexachloroethane	1	ND		10.0
70-30-4	Hexachlorophene	1	ND		10.0
1888-71-7	Hexachloropropene	1	ND		10.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0
78-59-1	Isophorone	1	ND		10.0
120-58-1	Isosafrole	1	ND		10.0
91-80-5	Methapyrilene	1	ND		10.0
56-49-5	3-Methylcholanthrene	1	ND		10.0
80-62-6	Methyl methacrylate	1	ND		10.0
66-27-3	Methyl methanesulfonate	1	ND		10.0
91-57-6	2-Methylnaphthalene	1	ND		10.0
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0
91-20-3	Naphthalene	1	ND		10.0
134-32-7	1-Naphthaleneamine (1-Naphthylamine	1	ND		10.0
91-59-8	2-Naphthaleneamine (2-Naphthylamine	1	ND		10.0
130-15-4	1,4-Naphthoquinone	1	ND		50.0
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/24/00 17:20:05



Report of Method Blank

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Organic Protocol - Single Batch

Phone: 504.469.0333
Fax: 504.469.0555

Lab ID: 01863B1

Description: Water Method Blank

Project No.: 201187

Method: Water GC/MS Semivolatile Organics

Batch: 01863

Units: ug/l

Prep Factor: 1

Leached:

Prepared: 13-Mar-00

Analyzed: 15-Mar-00 11:09

JAM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0
98-95-3	Nitrobenzene	1	ND		10.0
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0
56-57-5	4-Nitroquinoline-1-oxide	1	ND		10.0
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0
55-18-5	N-Nitrosodiethylamine	1	ND		10.0
62-75-9	N-Nitrosodimethylamine	1	ND		10.0
86-30-6	N-Nitrosodiphenylamine (Diphenylami	1	ND	A10	10.0
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0
59-89-2	N-Nitrosomorpholine	1	ND		10.0
100-75-4	N-Nitrosopiperidine	1	ND		10.0
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0
99-55-8	5-Nitro-o-toluidine	1	ND		10.0
608-93-5	Pentachlorobenzene	1	ND		10.0
76-01-7	Pentachloroethane	1	ND		10.0
82-68-8	Pentachloronitrobenzene	1	ND		10.0
87-86-5	Pentachlorophenol	1	ND		25.0
62-44-2	Phenacetin	1	ND		10.0
85-01-8	Phenanthrene	1	ND		10.0
108-95-2	Phenol	1	ND		10.0
106-50-3	p-Phenylenediamine	1	ND		10.0
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0
23950-58-5	Pronamide	1	ND		10.0
129-00-0	Pyrene	1	ND		10.0
110-86-1	Pyridine	1	ND		10.0
94-59-7	Safrole	1	ND		10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0
95-53-4	o-Toluidine	1	ND		10.0
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitro	1	ND		10.0

112 compound(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/24/00 17:20:06



Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Multiple Parameters - Multiple Batches

Phone: 504.469.0333
Fax: 504.469.0555

Project No.: 201187

Parameter	Batch	Blank	ARL	Units	LCS	LCS	LCS	MS	MS	MS	(1)MS	DUP	QC Limits	RPD	Qu	
					Spike	%Rec	LCSD	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	Max
Mercury	01903	ND	0.200	ug/l	1.00	113			1.00	77	104	30	30	80 - 120	75 - 125	20
Antimony	01952	ND	60.0	ug/l	1000.00	101			500.00	98	100	2		80 - 117	46 - 133	20
Arsenic	01952	ND	10.0	ug/l	1000.00	96			2000.00	93	94	1		74 - 120	62 - 129	20
Barium	01952	ND	200.	ug/l	1000.00	99			2000.00	95	100	5		72 - 125	51 - 131	20
Beryllium	01952	ND	5.00	ug/l	1000.00	97			50.00	95	99	4		80 - 116	53 - 126	20
Cadmium	01952	ND	5.00	ug/l	1000.00	97			50.00	92	93	1		82 - 113	48 - 129	20
Chromium	01952	ND	10.0	ug/l	1000.00	100			200.00	0	200	200		75 - 124	53 - 135	20 Q3
Cobalt	01952	ND	50.0	ug/l	1000.00	103			500.00	96	101	5		71 - 126	67 - 115	20
Copper	01952	ND	25.0	ug/l	1000.00	109			250.00	109	115	5		81 - 120	64 - 129	20
Lead	01952	ND	3.00	ug/l	1000.00	99			500.00	95	96	1		76 - 122	54 - 127	20
Nickel	01952	ND	40.0	ug/l	1000.00	100			500.00	96	97	1		73 - 124	46 - 139	20
Selenium	01952	ND	5.00	ug/l	1000.00	91			2000.00	84	85	1		71 - 117	47 - 133	20
Silver	01952	ND	10.0	ug/l	500.00	138			50.00	124	125	1		69 - 120	17 - 148	20 Q4
Thallium	01952	ND	10.0	ug/l	1000.00	99			2000.00	87	88	1		55 - 133	22 - 137	20
Tin	01952	ND	20.0	ug/l	1000.00	94			1000.00	95	96	1		80 - 120	45 - 131	20
Vanadium	01952	ND	50.0	ug/l	1000.00	99			500.00	95	100	5		73 - 125	73 - 117	20
Zinc	01952	ND	20.0	ug/l	1000.00	99			500.00	94	100	6		81 - 120	51 - 135	20

#Error

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

* denotes recovery outside of QC limits.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

3/24/00 17:20:07



Report Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
Saint Rose, LA 70087

Single Project

Phone: 504.469.0333
Fax: 504.469.0555

Project No.: 201187

ALL Qualifiers

Qualifier	Qualifier Description
N	See narrative for a detailed explanation.

Analyte Qualifiers

Qualifier	Qualifier Description
A7	3-Methylphenol and 4-methylphenol coelute under the conditions used for analysis, therefore the precise isomer in the sample cannot be determined. The sample concentration is arbitrarily reported as 4-methylphenol.
A10	N-Nitrosodiphenylamine is reported as diphenylamine.
A11	This analyte is a common solvent. Its presence in field samples may be an artifact of sample collection, transport, laboratory storage or analysis.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit. (Organics Only)

General Qualifiers

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.

QC Qualifiers

Qualifier	Qualifier Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
Q4	The laboratory control sample recovery is poor. Acceptable method performance for this analyte has been demonstrated by the matrix spike recovery.

Sample Qualifiers

Qualifier	Qualifier Description
D6	The sample was analyzed at a dilution based upon the screening information.
M1	The sample required reextraction and/or reanalysis due to surrogate recoveries outside the QC limits. Reanalysis yielded similar results, indicating a sample matrix effect. The results reported are from the original analysis.
P11	A reduced sample aliquot was prepared because of an insufficient amount of available sample.

Due liability

The Right Chem, The Right Solution®

U7NAIN-UR-U7USIUY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.